

NAVAL POSTGRADUATE SCHOOL
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THESIS

**STANDARDIZED ACCOUNTING ASHORE FOR
AFLOAT ACTIVITIES**

by

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June, 1996

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STANDARDIZED ACCOUNTING ASHORE FOR AFLOAT ACTIVITIES

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of the requirements for the degree of

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ABSTRACT

With limited resources and reduced funding for Naval forces, there is a need to standardize accounting ashore for all afloat activities. The purpose of this thesis was to review the framework for standardization of inventory reporting afloat under one stores (inventory) accounting system, referred to as the Material Financial Control System-Retail (MFCS-Retail). Additional analysis was conducted on general funds obligational reporting for afloat Operating Targets (OPTARS) and the conversion to the Standard Accounting and Reporting System, Field Level (STARS-FL) system. Empirical research was conducted at DFAS Operating Locations in San Diego, California and Norfolk, Virginia to review existing stores accounting and general funds management procedures. Additionally, financial reconciliation procedures were reviewed for inventory and financial accounting, with the goal of using artificial intelligence to reduce unmatched receipts and expenditures. Emphasis was placed on areas that could be streamlined and automated to provide timeliness in reporting, while reducing workload afloat. The major finding of this research was that standardizing accounting for inventories afloat under MFCS-Retail and STARS-FL for OPTAR management allows for streamlining detailed inventory management and financial reporting ashore. A major benefit is the reduction of workload afloat through the standardization of reporting across the fleet.

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I. INTRODUCTION

A. BACKGROUND

In the area of Financial Management, the goal for the Fleet and Type Commanders has been to improve accuracy and timeliness of financial reporting, while reducing the financial workload for afloat activities. Under the guidance of the Fleet Supply Policy Council (FSPC), chaired by Naval Supply Systems Command (NAVSUP), Code 04, the fleet representatives chose the Material Financial Control System-Retail (MFCS-Retail) for Stores Accounting and the Standard Accounting and Reporting System, Field Level (STARS-FL) for general funds management, or OPTAR accounting for afloat activities.

The MFCS system was originally designed by the Navy Inventory Control Point (NAVICP) and Fleet Material Support Office (FMSO) to improve Inventory Control Point (ICP) wholesale material and financial accounting operations, integrate the business operations of the ICP, and correct accounting system compliancy deficiencies related to Department of Defense Instruction 7000.14R the Financial Management Regulation (FMR) and Chief Financial Officer (CFO) act. The Defense Business Operations Fund (DBOF) Corporate Board selected MFCS as an interim migratory system for the Navy wholesale supply management business area in December 1994. Additionally, MFCS was selected in November 1995 to perform retail stores accounting afloat and ashore by the Assistant Secretary of the Navy for Financial Management (ASN&FM&C) and Director of the Defense Accounting and Finance Service Headquarters (DFAS HQ). The proposed development project to integrate ashore and afloat retail stores accounting into MFCS is known as MFCS-Retail. MFCS-Retail is essential to Navy efforts to transfer afloat accounting workload ashore.

The Fleet Resource Accounting Module (FRAM) is a field level accounting system that has been in existence for more than 25 years for use in general funds management or OPTAR accounting for afloat activities. FRAM consists of two mainframe systems, which provide fleet accounting with one system on the East Coast at OPLOC Norfolk, Virginia and one system on the West Coast at OPLOC San Diego, California. All afloat activities reported financial data to one of the OPLOCs which was then consolidated and reported to the appropriate Type Commanders, Fleet Commanders and other interested members in the chain of command. As a result of FRAM's age and limited capability, DFAS Cleveland and the Navy determined that the system needed to be modernized and standardized. The system which was selected for general funds management or OPTAR accounting to replace FRAM was the Standard Accounting and Reporting System, Field Level (STARS-FL).

B. METHODOLOGY

Archival, empirical, and opinion research was conducted to ascertain the impact of the current workload afloat and ashore involving financial transaction reporting and processing through the current Defense Finance and Accounting Service Operating Locations (DFAS OPLOCS). Archival research examined current instructions and guidelines used in stores accounting practices and detailed obligational reporting under afloat OPTAR accounting. The research included a review of the current Stores Accounting procedures used by DBOF activities for Financial Inventory Report (FIR) generation and detailed obligational reporting for O&MN funds management under the current Fleet Resource Accounting Module (FRAM). The primary focus was on the process for the consolidation of all stores (inventory) accounting ashore for all afloat activities under DBOF, using the Material Financial Control System-Retail (MFCS-Retail) as the retail inventory system for afloat inventory management.

Empirical research was conducted by visiting DFAS Operating Locations (OPLOCS) in San Diego, California and Norfolk, Virginia to review existing stores accounting procedures and to gather data on current dollar values of unmatched summaries / billings and unmatched receipts which require reconciliation prior to conversion to MFCS-Retail. Further analysis was conducted by reviewing the success of the Force Inventory Management Analysis Reporting System (FIMARS) program at COMNAVSURFLANT and the cost savings realized through redistribution of excess material to satisfy fleet deficiencies under the Consolidated Residual Asset Management Support Information system (CRAMSI). This included an analysis of current inventory costs including allowance values, dollar values of excesses on hand or on order, and inventory deficiencies. This data was used to extrapolate cost savings which may be realized through implementation of MFCS-Retail by using excess material to satisfy existing deficiencies in the fleet and the wholesale system ashore. Additional data was collected on what detailed obligational reporting methods were being used by afloat activities for financial reporting and how these methods could be streamlined through automation and further processed to STARS-FL. Empirical research and analysis were conducted in evaluating the process.

In addition, OPTAR O&MN detailed obligational reporting for afloat activities under the Standard Accounting and Reporting System, Field Level (STARS-FL) system, was analyzed and evaluated. Emphasis was placed on areas that could be streamlined and automated to provide increased accuracy and timeliness in reporting and reducing workload afloat.

Finally, opinion research was used in conducting interviews with various key personnel at the Type Commanders, Fleet Commanders, Naval Supply Systems Command (NAVSUP), Navy Inventory Control Point (NAVICP), DFAS Operating Locations (OPLOCS) and other parties.

C. RESEARCH QUESTIONS

The following research questions were analyzed and evaluated during this thesis:

Primary: Can Standardized Accounting Ashore be conducted for all afloat activities using the Defense Business Operations fund for stores (inventory) accounting and STARS-FL for general funds management and financial accounting?

Subsidiary:

1. What are the advantages of Standardized Stores Accounting Ashore for afloat activities using DBOF? This issue includes the cost-benefit analysis of Total Asset Visibility (TAV) for redistribution of excess inventory to satisfy existing material deficiencies in the fleet and wholesale system ashore.
2. What steps would be necessary in reconciliation of afloat inventories not now under DBOF prior to capitalization into DBOF? Would there be a windfall profit for DBOF as a result of capitalization?
3. What system would be used to provide material accountability ashore (stores accounting) for afloat inventories? Where would it reside and what activity would manage it?
4. How would Stock-In-Transit (SIT) and Material-In-Transit (MIT) be managed? What reconciliation action is required for previous Other Supply Officer (OSO) and Interfund Billing (IFBs) transfers and issues which remain unreconciled at time of conversion to the new stores accounting system?
5. What actions would be taken to validate a Proof of Shipment (POS) from an afloat activity for material issued or transferred to other activities?

6. What steps could be taken to streamline detailed obligational reporting under general funds management to help eliminate the need for biweekly financial transmittals and monthly Budget Operating Target (OPTAR) reporting?
7. What steps could be taken to automate Aged Unfilled Order Listings (AUOLS) and Summary Filled Order Expenditure Difference Listings (SFOEDLS) used for general funds management or OPTAR accounting?

D. SCOPE AND LIMITATIONS

The research for this thesis was primarily a field study to develop a framework to analyze the consolidation of inventory reporting afloat under one stores accounting system, referred to as the Material Financial Control System-Retail (MFCS-Retail). Under MFCS-Retail, all inventories would be financed with the Defense Business Operations Fund (DBOF). Additional analysis was conducted on general funds obligational reporting for Operating Targets (OPTARS) from afloat activities and the conversion to the Standard Accounting and Reporting System, Field Level (STARS-FL) system. Primary attention was on how the Navy currently manages afloat inventories and the advantages and challenges of standardization under MFCS-Retail. Potential advantages that may be incorporated into the MFCS-Retail system include the success of the Force Inventory Management Analysis Reporting System (FIMARS), redistribution of excess material to satisfy fleet deficiencies under the Consolidated Residual Asset Management Support Information system (CRAMSI), and standardization of software applications afloat for supply management. Additional research analyzed the current obligational reporting procedures afloat under the Fleet Resource Accounting Module (FRAM) system and how the conversion to the Standard Accounting and Reporting System, Field Level (STARS-FL) system could help establish a framework for increased accuracy and timeliness of financial reporting while reducing workload afloat.

E. ORGANIZATION OF STUDY

The remainder of this thesis is divided into seven chapters and four appendices, as follows:

Chapter II: THE CURRENT BUSINESS PROCESS

This chapter examines the current business process for stores (inventory) accounting and general funds management processes under Operating Target (OPTAR) accounting. Emphasis is placed on how afloat Defense Business Operations Fund (DBOF) activities currently manage stores accounting under Special Accounting Class (SAC) 207. In addition, an overview is provided of the Financial Inventory Report (FIR) and reconciliation of unmatched receipts and expenditures for afloat DBOF activities. Next, a review of end-use inventory accounting for non-DBOF activities is provided. This review includes how end-use activities procure storeroom stock and how this inventory is pre-expended as end use. Finally, an overview of the financial reconciliation process for general funds management, or OPTAR accounting is provided. This overview includes a description of the matching of obligations held by the OPLOC against expenditures and the production of financial exception listings, including the Aged Unfilled Order Difference Listing (AUOL) and Summary Filled Order Expenditure Difference Listing (SFOEDL).

Chapter III: ADVANTAGES OF STANDARDIZED STORES ACCOUNTING ASHORE UNDER THE DEFENSE BUSINESS OPERATIONS FUND (DBOF)

This chapter examines the advantages of standardized stores accounting ashore under DBOF. First, an overview is provided of the impact of the Chief Financial Officer Act (CFO) compliancy requirements and the Defense Management Review Decision (DMRD) 910 on financial management. Additionally, a review of the plans for Afloat Asset Visibility (AAV) and the plan for standardization of stores accounting under DBOF using the Material Financial Control System (MFCS) as the Navy's selection for inventory (stores) accounting afloat under the new software

called Relational Supply (R-Supply) is provided. Next, an analysis of the success of current cost avoidance programs managed by the Type Commanders including the Force Inventory Management Analysis Reporting System (FIMARS), Consolidated Residual Asset Management Screening Information System (CRAMSI), Residual Asset Screening Program (RASP), and Residual Asset Management (RAM) programs is provided. Finally, an analysis is provided of a test involving the redistribution of material excesses to satisfy material deficiencies among 37 ships under Commander Naval Surface Forces, Atlantic Fleet (COMNAVSURFLANT) using FIMARS and how this data could be used to extrapolate costs and benefits which may be realized through implementation of MFCS.

Chapter IV: RECONCILIATION OF AFLOAT INVENTORIES NOT UNDER DBOF

This chapter examines the steps required in allowance validation of the Coordinated Shipboard Allowance List (COSAL) at the shipboard level prior to capitalizing end-use inventories into DBOF. This analysis includes discussion on whether there would be a windfall profit for DBOF as a result of capitalizing end-use inventories into DBOF. An overview is provided of the production of initial allowances and the overall impact of new initiatives, such as the success of the Fleet Logistics Support Improvement Program (FLSIP) and the new .5 FLSIP plus COSAL. Additionally, an analysis is presented for the requirement to fund all storeroom stock deficiencies prior to conversion to MFCS-Retail and how these deficiencies could be funded through the windfall profit generated through the sale of excess end-use inventories. Finally, an overview of the opportunity to establish an Aviation Coordinated Allowance List (AVCAL) under DBOF for shipboard Light Airborne Multi-Purpose System (LAMPS) helicopter pack-up support is provided.

Chapter V: STOCK-IN-TRANSIT AND MATERIAL-IN-TRANSIT MANAGEMENT

This chapter examines the potential management of unmatched receipts and expenditures under the Material Financial Control System-Retail (MFCS-Retail). First a review is presented of the current procedures for processing unmatched receipts and expenditures for afloat DBOF activities. Next, an overview is provided on how MFCS-Retail related activities would become Centralized Accounting and Billing (CAB) activities and how these activities would be responsible to report issues, receipts and adjustments through a Transaction Item Reporting (TIR) process. Additionally, a description is provided of the Stock-In-Transit (SIT), Material-In-Transit (MIT) and Accounts Payable related transactions for DBOF activities under MFCS-Retail. This analysis includes the need for automated financial reconciliation of unmatched transactions through the use of SIT/MIT net for automated tracking, controlling and resolving of unmatched SIT/MIT and Accounts Payable related issues and receipts. Finally, an overview of the requirements to reconcile the current unmatched receipts and expenditures greater than 90 days unmatched for DBOF activities prior to conversion to MFCS-Retail is provided.

Chapter VI: STREAMLINING DETAILED OBLIGATIONAL REPORTING

This chapter reviews the current detailed obligational reporting procedures used by the fleet for reporting of financial transactions under general funds management or Operating Target (OPTAR) accounting. In addition, an overview is provided of the steps being taken to convert current procedures for fleet accounting to the Standard Accounting and Reporting System, Field Level (STARS-FL). Emphasis is placed on how the conversion to STARS-FL could assist in establishing a framework for removing financial accounting afloat to an ashore accounting center. Finally, an analysis is provided on what steps could be taken to streamline current detailed obligational reporting under general funds

management to help eliminate the need for biweekly financial transmittals and monthly Budget Operating Target (OPTAR) reporting by sending financial transactions daily to STARS-FL.

**Chapter VII: AGED UNFILLED ORDER LISTINGS (AUOLs) AND
SUMMARY FILLED ORDER EXPENDITURE
DIFFERENCE LISTINGS (SFOEDLs) AUTOMATION**

This chapter focuses on what steps are being taken to automate the financial listings forwarded to the fleet from the OPLOCs for financial reconciliation under general funds management. These listings include the Aged Unfilled Order Listing (AUOL) and Summary Filled Order Expenditure Difference Listing (SFOEDL). Emphasis is placed on what steps could be taken now to automate detailed unfilled order review for all unfilled orders and expenditure differences generated as a result of the financial reconciliation process at the respective OPLOCs. Next an overview of the new Requisition Information Management Analysis and Reporting System (RIMARS) is presented, along with discussion of how this program could help remove or reduce financial management of unfilled orders afloat and transfer the workload to a centralized database ashore. Finally, discussion is provided on the automation of the Summary Filled Order Expenditure Difference Listing (SFOEDL), including detailed processing and challenging of transactions from the fleet to the OPLOC.

Chapter VIII: CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a summary of steps which can be taken to standardize accounting ashore for all afloat activities using DBOF for stores (inventory) accounting and STARS-FL for general funds management. Conclusions and recommendations are provided for the primary and all subsidiary questions stated at the beginning of this thesis. This review includes the advantages of standardized stores accounting ashore, including the benefits realized through Total Asset Visibility (TAV). Additionally, an outline is provided on the steps necessary in reconciliation of afloat inventories not under DBOF prior to capitalization.

Next, a discussion of the management of unmatched inventory transactions, including Stock-In-Transit (SIT), Material-In-Transit (MIT) and Accounts Payable, and how these transactions could be centrally managed through an automated process under the Navy Inventory Control Point (NAVICP) is provided. This discussion includes the need to reconcile current unmatched DBOF related receipts and expenditures prior to conversion to MFCS-Retail. Finally, conclusions and recommendations are provided on steps to streamline detailed obligational reporting under STARS-FL and how bi-weekly transmittals and end of month Budget OPTAR Reports (BORs) could be eliminated. This discussion includes recommendations for automating detailed unfilled order and difference data.

Appendix A: DBOF AFLOAT ACTIVITIES

This appendix represents an alphabetical list of all afloat activities currently operating under the Defense Business Operations Fund (DBOF).

Appendix B: FINANCIAL INVENTORY REPORT (FIR) CODES

This appendix provides a list of all Financial Inventory Report (FIR) codes and associated definitions currently being used in afloat DBOF accounting under Special Accounting Class (SAC) 207.

Appendix C: SUMMARY FILLED ORDER EXPENDITURE DIFFERENCE LISTING (SFOEDL) CHALLENGE CODES AND DEFINITIONS

This appendix provides a list of all the appropriate Summary Filled Order Expenditure Difference Listing (SFOEDL) challenge codes and their associated descriptions. These codes are used by the afloat financial technician when challenging difference charges in general funds management from the SFOEDL.

**Appendix D: COMNAVSURFLANT 37 SHIPS SELECTED FOR
FIMARS REALLOCATION OF EXCESSES TO
REDUCE DEFICIENCIES MARCH 1996**

This appendix represents a list of 37 ships which were selected as part of a test of the Force Inventory Management Analysis Reporting System (FIMARS). In this test, excesses from all 37 ships were reviewed to determine which material could be redistributed to satisfy existing stock deficiencies within the same 37 ships.

II. THE CURRENT BUSINESS PROCESS

A. GENERAL

This chapter examines the current business process for stores (inventory) accounting and general funds management processes under Operating Target (OPTAR) accounting. First, a review will be provided of afloat stores (inventory) accounting under the Defense Business Operations Fund (DBOF). This review will include descriptions of the Defense Business Operations Fund afloat and the management of the Financial Inventory Report (FIR) used for DBOF stores accounting. This data is forwarded to the applicable Defense Finance Accounting Service Operating Location (DFAS OPLOC) for up-line reporting on receipts, expenditures and inventory values managed afloat under DBOF. Second, an overview is provided of the OPLOC financial processing which describes the unmatched receipt and expenditure processing procedures currently conducted at the DFAS OPLOCS for DBOF related transactions. Additionally, current performance data will be provided for unmatched receipts (A&G listing) and unmatched expenditures (C&H listing) by Type Commander and Fleet Commander. Third, a review of end-use (inventory) accounting for non-DBOF activities will be provided. This will include how material is procured for storeroom stock on hand and pre-expended as end-use inventory. Next, under general funds management, the chapter describes how afloat activities receive authorized grants referred to as OPTARs for financial operations and how detailed or summary obligations and cancellations are periodically forwarded to the DFAS OPLOCS for up-line reporting. Finally, an overview will be provided of the financial reconciliation process for general funds management. The process results in the matching of obligations and expenditures under the Fleet Resource Accounting Module (FRAM) system and the production of the Aged Unfilled Order Listing (AUOL) and Summary Filled Order Expenditure Difference Listing (SFOEDL) which must be reviewed and worked by the afloat financial managers.

B. STORES (INVENTORY) ACCOUNTING UNDER THE DEFENSE BUSINESS OPERATIONS FUND (DBOF)

1. DBOF Afloat

Title 10 of the U.S. code Article 2208 authorized the Secretary of Defense (SECDEF) to establish working capital funds for the Department of Defense (DoD). The purpose of working capital funds was to finance inventories of stores, supplies, materials and equipment and to provide working capital for industrial and commercial activities. [Ref. 1: p. F1-G3]

The Defense Business Operations Fund (DBOF) is a working capital fund or revolving fund whose assets have been provided by capitalization of former service-related revolving funds. The Naval Supply Management Business area of the DBOF is authorized by the National Security Act of 1947 and was formerly known as the Navy Stock Fund (NSF). The purpose of this fund is to finance the procurement of specific categories of material to support ships, aircraft, military personnel and the shore establishment of the Navy. It is operated as a revolving fund that finances the purchase and maintenance of stocks of common supply items necessary for the support and operation of the Navy. [Ref. 1: p. F1-G10]

DBOF use afloat is a financing mechanism for stores or inventory accounting for activities under the Special Accounting Class (SAC) 207. Those afloat activities operating as SAC-207 or AV-207 (Aviation) finance their inventories through DBOF and do not receive an annual appropriation for procurement of inventories. As DBOF activities, these ships accept orders or requisitions from their customers and use the DBOF accounting to procure the material for delivery to the customer. Upon receipt of material from an outside source or issue from storeroom stock, the DBOF account is reimbursed and the appropriate general fund or Operating Target (OPTAR) is charged for the material. This revolving cycle continues and that is why DBOF is considered a revolving fund. Figure 2.1 is an illustration of the DBOF fund as a large revolving fund.

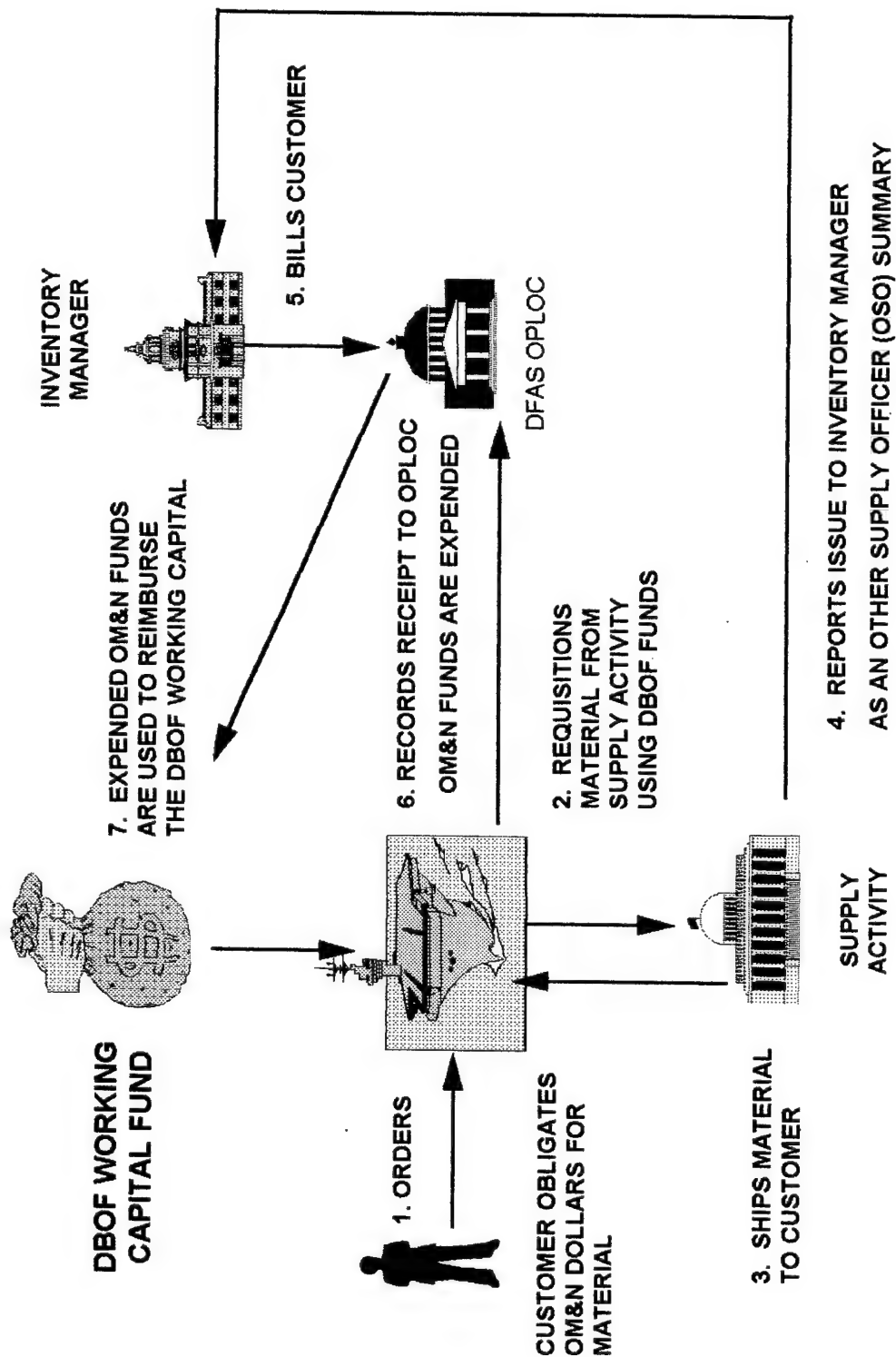


Figure 2.1 The DBOF Fund as a Large Revolving Fund

The initial Coordinated Shipboard Allowance List (COSAL) is funded through Naval Sea Systems Command (NAVSEA) procurement accounts which include Shipbuilding and Conversion, Navy (SCN) or Other Procurement Navy, (OPN). [Ref.2]

Upon commissioning of a DBOF afloat activity, all existing inventory on hand in storeroom stock is capitalized into the DBOF account. Material deficiencies which are outstanding at the time of commissioning are capitalized into DBOF upon receipt of the material. This process establishes the baseline inventory of all storeroom stock. Appendix 'A' provides a current listing of all afloat DBOF activities.

Future additions to allowances lists are funded through DBOF with the exception of Depot Level Repairables (DLRs) or Aviation Depot Level Repairables (AV-DLRs). DLRs are funded through the use of the Naval Sea Systems Command (NAVSEA) Technical Operating Budget (TOB), which is part of the procurement account used for initial outfitting of inventories. [Ref. 3] AV-DLRs are funded through the use of another procurement account referred to as Aircraft Procurement, Navy or APN-6. In both cases, material is capitalized into the DBOF account under their respective Financial Inventory Report (FIR) accounts upon receipt of the material.

2. Management Of The Financial Inventory Report (FIR)

The Financial Inventory Report (FIR) or Report 03 is a control ledger account used in summarizing stores accounting for categories of material. The FIR report is broken down by cognizance symbol (COG). A COG is a two-character code which identifies the Budget Project (BP) manager responsible for the category of material held in inventory. The basic structure of the FIR can be viewed as a matrix of summarized information which lists the opening inventory, receipts, expenditures and closing inventory of material managed under the two digit cognizance symbol and the dollar value of transactions affected aboard an afloat activity. Table 2.1 is an example of a FIR report on a particular cognizance symbol 1H.

FIR CODE	FIR CAPTION	OPEN INV.	RECEIPTS	EXPENDITURES	CLOSING INV.
H1	OPENING INV	25000			
A1	COMMERCIAL RECEIPTS		5000		
A3	DoD RECEIPTS		2000		
B2	RECEIPTS W/O REIMBURSEMENT		2550		
D4	INVENTORY GAIN		1100		
E1	PURCHASE VARIANCE (GAIN)		300		
F4	OSO RECEIPTS		14000		
F5	SERVMART RECEIPTS		400		
J1	ISSUES WITH REIMBURSEMENT			3300	
K5	ISSUES W/O REIMBURSEMENT			1500	
L1	TRANSFERS TO DISPOSAL			200	
M4	INVENTORY LOSSES			1400	
M5	INVEN. LOSSES IN SHIPMENT			2200	
N1	PURCHASE VARIANCE (LOSS)			400	
P4	OSO TRANSFER			10000	
R1	CLOSING INV.				31350
	TOTALS	25000	25350	19000	31350

Table 2.1 Example of a FIR Report on COG 1H

FIR codes are two digit codes that identify the various types of transactions that affect financial inventory records of the stock account. These FIR codes will appear under the headings of opening inventory, receipts, expenditures and closing inventory on the FIR report. Appendix 'B' provides a list of all applicable FIR codes and their definitions.

Managers reviewing the FIR report are particularly interested in the various values reflected in the appropriate FIR code. Opening inventory values of the current FIR report will be reviewed against closing inventory values of the last FIR report to ensure they are equal. Certain FIR codes will be reviewed to determine if there have been abnormal adjustments made such as gains in inventory, losses or survey of material. Supporting detailed reports such as the Receipt Report 04 and Other Supply Officer (OSO) Report 05 will be validated against the FIR report to ensure proper balancing of the summarized FIR Report 03 with the totals of the respective detailed reports. Any out-of-balance situations will be immediately investigated and promptly corrected prior to up line reporting to the Defense Finance Accounting Service Operating Location (DFAS OPLOC). Once the FIR report and supporting details have been validated by the shipboard financial managers, the report, supporting details and a computer output file in the form of a tape, floppy disk or other automated media are forwarded to the responsible DFAS OPLOC for FIR consolidation, reconciliation and further up line reporting on the values of various transactions and on hand inventory managed under DBOF afloat.

A message report to the applicable OPLOC is required for DBOF charges and credits by the first calendar day of the month following the month being reported. Other financial inventory returns, including the FIR, are required to reach the OPLOC by the fourth calendar day of the month following the reporting period. [Ref. 4: p. 3-41]

C. UNMATCHED RECEIPT AND EXPENDITURE PROCESSING FOR DBOF ACTIVITIES

1. OPLOC Financial Processing

The applicable OPLOC will receive, audit and prepare consolidated reports, including the FIR. Consolidated FIR data will be reported by the OPLOC and forwarded monthly to the Navy Regional Finance Center, Washington, D.C., the applicable Type Commander and the inventory control point for the applicable Budget Project (BP) manager which has cognizance of DBOF material.

[Ref. 4: p. 3-52]

DBOF financial reconciliation of incoming receipts and expenditures is conducted on a monthly basis by the OPLOC. Figure 2.2 illustrates the reconciliation effort conducted by the DFAS OPLOCS between incoming receipts and expenditures from individual afloat DBOF activities with incoming receipts and expenditures from outside activities, which include other Navy DBOF activities, non-Navy (e.g., Defense Logistics Agency (DLA)) and commercial billing activities). As a result of this financial reconciliation of detailed receipts and expenditures, the detailed Unmatched Receipt Reports (A&G listings) and detailed Unmatched Expenditure Reports (C&H listings) are produced and forwarded to the appropriate DBOF activity for review and action.

2. Unmatched Receipts

Monthly receipt data is forwarded from the DBOF activity to the responsible OPLOC for reconciliation against an incoming expenditure. During the financial reconciliation process at the OPLOC, detailed receipts from the DBOF activities are matched against incoming expenditures in the form of abstracts, summaries and billings from supplying activities. If a receipt does not match or only partially matches an incoming expenditure, the unmatched portion of the receipt will be reflected on the Unmatched Receipt Report (A&G Listing).

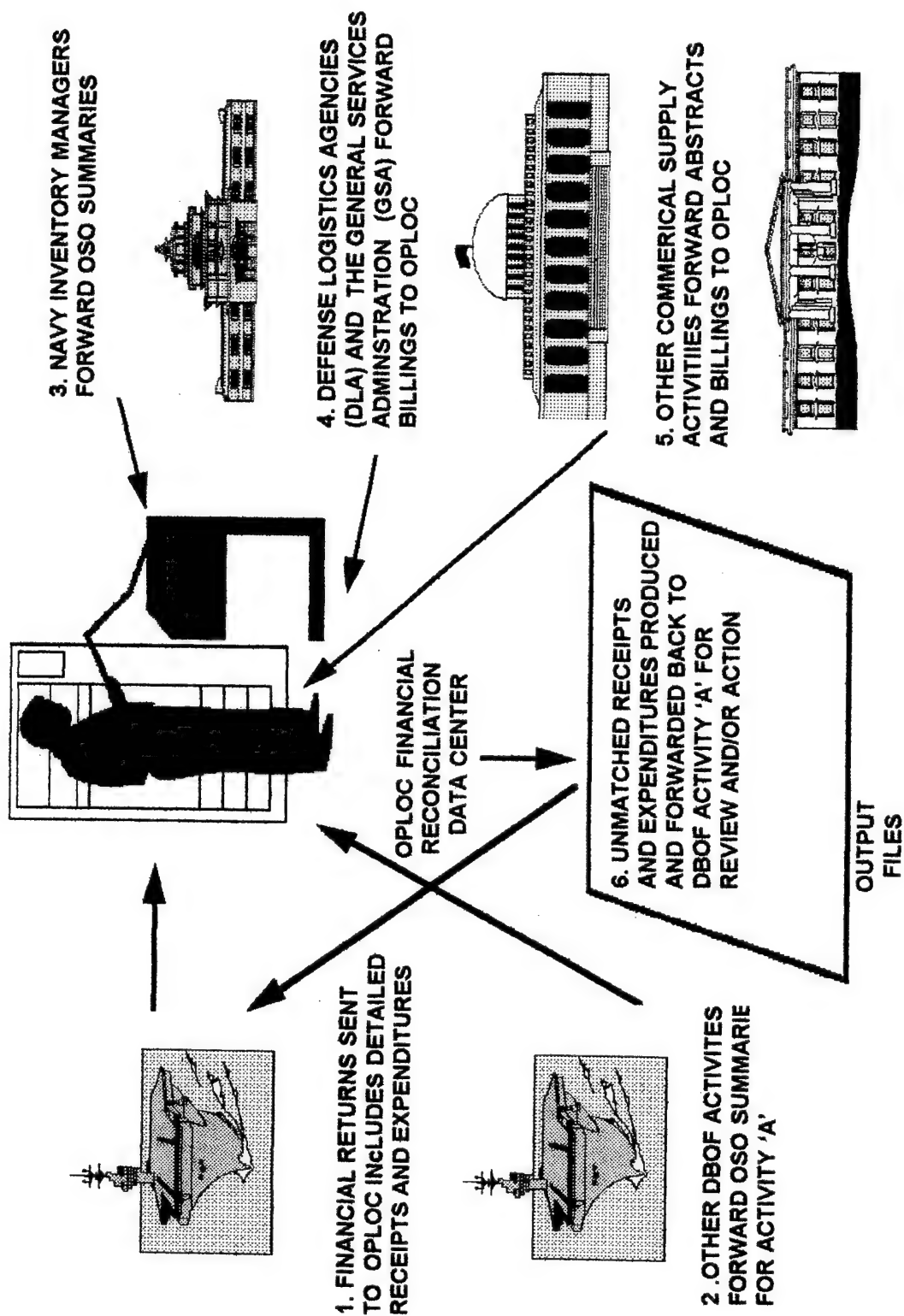


Figure 2.2 The DBOF Financial Reconciliation Process

An unmatched receipt is the result of a DBOF activity reporting receipt of material from a Navy or non-Navy activity (i.e., Defense Logistics Agency (DLA) or Disbursing Officer Voucher (DOV)) to the OPLOC and the OPLOC has not recorded a matching expenditure. Unmatched Caption 'A' receipts are receipts from other Navy DBOF activities or Other Supply Officer (OSO) summaries. Unmatched Caption 'G' receipts are receipts from non-Navy activities, including Defense Logistics Agencies (DLA), General Services Administration (GSA) and commercial activities. Some reasons for an unsatisfied match condition for a receipt include:

- A DBOF activity submits a receipt document, but the issuing activity does not submit an expenditure document.
- The DBOF activity processes a receipt for material when there is a gain by inventory (this is a result of a physical inventory where there are more of the items on the shelf than recorded on the Basic Material File (BMF)) but the activity does not want to post an inventory adjustment gain.
- The DBOF activity processes a receipt for material which indicates receipt from Navy (OSO), non-Navy (billing) or commercial source for material which should have been capitalized as an initial allowance item upon receipt of the material.
- The quantities, total dollar values or both on the receipt and expenditure documents submitted do not agree.

Table 2.2 provides a cumulative summary of unmatched receipts (A&G) for each Type Commander and Fleet Commander for the month of December 1995, including dollar value of totally or partially unmatched receipts and requisition counts. As illustrated in Table 2.2, the total dollar value of unmatched receipts (A&G) is \$1,274,482,000, with 428,776 documents listed as a totally or partially unmatched receipts.

CUMULATIVE UNMATCHED RECEIPTS FOR DECEMBER 1995 (DOLLARS (\$) IN THOUSANDS)		
ACTIVITY	DOLLAR VALUE UNMATCHED	RECORD COUNT
COMMANDER NAVAL SURFACE FORCES ATLANTIC FLEET (CNSL)	\$ 40,035	18,649
COMMANDER SUBMARINE FORCES ATLANTIC FLEET (CSL)	\$ 7,257	14,219
COMMANDER NAVAL AIR FORCES ATLANTIC FLEET (CNAL)	\$ 123,599	41,133
FLEET MARINE FORCES ATLANTIC FLEET (FMFLANT)	\$ 83,228	34,319
TOTAL COMMANDER-IN-CHIEF ATLANTIC FLEET (CINCLANTFLT)	\$ 254,119	108,320
COMMANDER NAVAL SURFACE FORCES PACIFIC FLEET (CNSP)	\$ 81,307	79,418
COMMANDER SUBMARINE FORCES PACIFIC FLEET (CSP)	\$ 28,450	25,612
COMMANDER NAVAL AIR FORCES PACIFIC FLEET (CNAP)	\$ 420,018	121,411
FLEET MARINE FORCES PACIFIC FLEET (FMFPAC)	\$ 490,588	94,015
TOTAL COMMANDER-IN-CHIEF PACIFIC FLEET (CINCPACFLT)	\$ 1,020,363	320,456
GRAND TOTAL OF CUMULATIVE UNMATCHED RECEIPTS FOR DBOF ACTIVITIES	\$ 1,274,482	428,776

**Table 2.2 Cumulative Summary of Unmatched Receipts (A&G)
For the Month of December 1995**

3. Unmatched Expenditures

Monthly expenditure data in the form of abstracts, summaries and billings from supply activities is forwarded to the responsible OPLOC for reconciliation against incoming receipts from individual afloat DBOF activities. This expenditure data can be received by the OPLOC by magnetic tape, floppy disk, autodisc cards and hard copy invoices or abstracts. If an incoming expenditure does not match or only partially matches an incoming receipt, the unmatched portion of the expenditure will be reflected on the Unmatched Expenditure Report (C&H Listing). Unmatched Caption 'C' expenditures are from other Navy DBOF activities or Other Supply Officer (OSO) summaries. Caption 'H' expenditures are from non-Navy activities such as Defense Logistics Agencies (DLA), General Services Administration (GSA) and commercial activities. Some reasons an unsatisfied match condition for an expenditure exists include:

- An expenditure has been received by the OPLOC from a supply activity and the DBOF activity has not recorded a receipt of material.
- The DBOF activity processes an erroneous gain by inventory when the material was an incoming receipt and should be processed as a receipt.
- The DBOF activity processes a receipt as a capitalization when it should have processed as a normal receipt not from initial outfitting requisitions.
- The quantities, total dollar values or both on the receipt and expenditure documents submitted do not agree.

Table 2.3 provides a cumulative summary of unmatched expenditures (C&H) for each Type Commander and Fleet Commander for the month of December 1995 including total dollar value unmatched or partially matched expenditures and requisition counts. As illustrated in Table 2.3, the total dollar value of unmatched expenditures (C&H) is \$345,904,000 with 161,484 documents listed as a totally or partially unmatched.

CUMULATIVE UNMATCHED EXPENDITURES FOR DECEMBER 1995 (DOLLARS (\$) IN THOUSANDS)		
ACTIVITY	DOLLAR VALUE UNMATCHED	RECORD COUNT
COMMANDER NAVAL SURFACE FORCES ATLANTIC FLEET (CNSL)	\$ 22,228	19,963
COMMANDER SUBMARINE FORCES ATLANTIC FLEET (CSL)	\$ 11,461	14,131
COMMANDER NAVAL AIR FORCES ATLANTIC FLEET (CNAL)	\$ 69,124	34,818
FLEET MARINE FORCES ATLANTIC FLEET (FMFLANT)	\$ 48,087	22,903
TOTAL COMMANDER-IN-CHIEF ATLANTIC FLEET (CINCLANTFLT)	\$ 150,900	91,815
COMMANDER NAVAL SURFACE FORCES PACIFIC FLEET (CNSP)	\$ 17,577	22,555
COMMANDER SUBMARINE FORCES PACIFIC FLEET (CSP)	\$ 5,110	9,018
COMMANDER NAVAL AIR FORCES PACIFIC FLEET (CNAP)	\$ 79,864	20,112
FLEET MARINE FORCES PACIFIC FLEET (FMFPAC)	\$ 92,453	17,984
TOTAL COMMANDER-IN-CHIEF PACIFIC FLEET (CINCPACFLT)	\$ 195,004	69,669
GRAND TOTAL OF CUMULATIVE UNMATCHED RECEIPTS FOR DBOF ACTIVITIES	\$ 345,904	161,484

**Table 2.3 Cumulative Summary of Unmatched Expenditures (C&H)
For the Month of December 1995**

D. END USE INVENTORY ACCOUNTING FOR NON-DBOF ACTIVITIES

1. Initial Outfitting for End-Use Inventory for New Construction Under Shipbuilding and Conversion, Navy (SCN)

The Navy is constantly procuring new systems, equipments and components. These items must be supported by material allowances such as spare and repair parts, special tools, test equipment and support equipment. [Ref. 5: p. 1-4] With ships under new construction, a form of Navy procurement dollars referred to as Shipbuilding and Conversion Navy (SCN) will be the source for funding all initial outfitting storeroom deficiencies to be carried in storeroom stock.

In the first phase of initial outfitting for new construction, the requirements are determined through a provisioning process referred to as a Coordinated Shipboard Allowance List (COSAL). The initial storeroom allowances are documented by the publication of an Allowance Parts List (APL). Other allowance list material may be stocked onboard a ship besides the COSAL items depending on the ship type. These allowance lists are found on DBOF funded activities and will not be held in end-use inventories. They include the Aviation Coordinated Allowance List (AVCAL), Tender and Repair Ships Load List (TARSLL) and Fleet Issue Load List (FILL). With the exception of Aviation Depot Level Repairables (AV-DLRs) and surface Depot Level Repairables (DLRs), the DBOF unique allowance lists are funded through DBOF. Aviation Depot Level Repairables are funded through a procurement account called Aircraft Procurement Navy (APN-6) which is managed by the Aviation Supply Office (ASO). Initial allowances for surface Depot Level Repairables are funded through SCN funding for ships in new construction. Funding for operating ships for surface Depot Level Repairables initial allowance is provided through Other Procurement Navy (OPN) and the Naval Sea Systems Command Technical Operating Budget (NAVSEA TOB).

2. Range and Depth Allowance Increases to the COSAL

Once a ship is commissioned, there is a vehicle for updating and validating the COSAL throughout the ship's useful life. This system is referred to as the Ship Configuration and Logistics Support Information System (SCLSIS). The SCLSIS system was implemented as the Navy's shipboard configuration and logistics management system. The primary purpose of SCLSIS was to ensure that the Navy's central repository of Ship Configuration and Logistics Support Index (SCLSI) accurately reflected the current and planned ship's configuration. SCLSI is maintained by a Naval Sea Systems Command (NAVSEASYS COM) Configuration Data Manager (CDM). The CDM will provide updated configuration data for ships to the Weapon Systems File (WSF) maintained by the Navy Inventory Control Point in Mechanicsburg, Pennsylvania (NAVICP(M)).

Through the SCLSIS process, COSAL allowance changes in the form of new allowances (range increases) and increased allowances (depth increases) will be provided to the ship for updating of the authorized inventory. These range and depth adds will be provided in the form of an Automated Shore Interface (ASI) process for automated ships and a hard copy COSAL change for non-automated ships. Allowance increases from range and/or depth adds will be funded through the Other Procurement Navy (OPN) account referred to as Naval Sea Systems Command Technical Operating Budget (NAVSEA TOB).

3. Stores Accounting for End-Use Activities

A major difference between end-use activities and DBOF activities is the stores accounting for shipboard inventory. In the case of DBOF activities, all inventory requisitioned through a procurement fund is capitalized upon receipt of the material. In the case of end-use activities, the shipboard inventory is expended as end-use upon receipt. Although the material is part of the shipboard inventory, the material is owned by the ship and responsible Type Commander and is not part of DBOF. Material issues from storeroom stock are not charged to the Operation and Maintenance, Navy (OM&N) funding until the end-use activity conducts stock

replenishment. Unlike the DBOF activity, the end-use activity does not report detailed receipt data ashore and does not submit a Financial Inventory Report (FIR) to the OPLOC at the end of each month. No official reporting of the dollar value of inventory held or detailed asset visibility is provided to anyone outside of the ship.

E. GENERAL FUNDS MANAGEMENT AND OPTAR ACCOUNTING

1. Flow of Funds for General Funds Management

As a result of the budget process, each year Congress enacts various appropriations for the Department of Defense. The key appropriation for afloat activities is the Operation and Maintenance, Navy (OM&N) appropriation. This particular appropriation authorizes Navy activities to buy needed materials and services. A portion of this appropriation is passed down through the chain of command to the individual activity in the form of an Operating Target or OPTAR grant. An OPTAR is an administrative allocation of funds issued by the Type Commander. However, the requirement for holding Title 31 (1517) responsibility for exceeding allocated funds rests with the Type Commander. [Ref. 6: p. D-4] Figure 2.3 illustrates the flow of funds from the Congress through the chain of command and finally to the individual OPTAR holder.

The term "Operating Target" is defined as an estimate of the amount of money which is granted to a ship by the Type Commander for operation of that unit to perform assigned tasks and missions. The number and type of OPTAR grants depend on the ship's mission. All afloat activities receive Supplies and Equipage (S&E) OPTAR grants to cover those expenses which are chargeable to the OM&N appropriation.

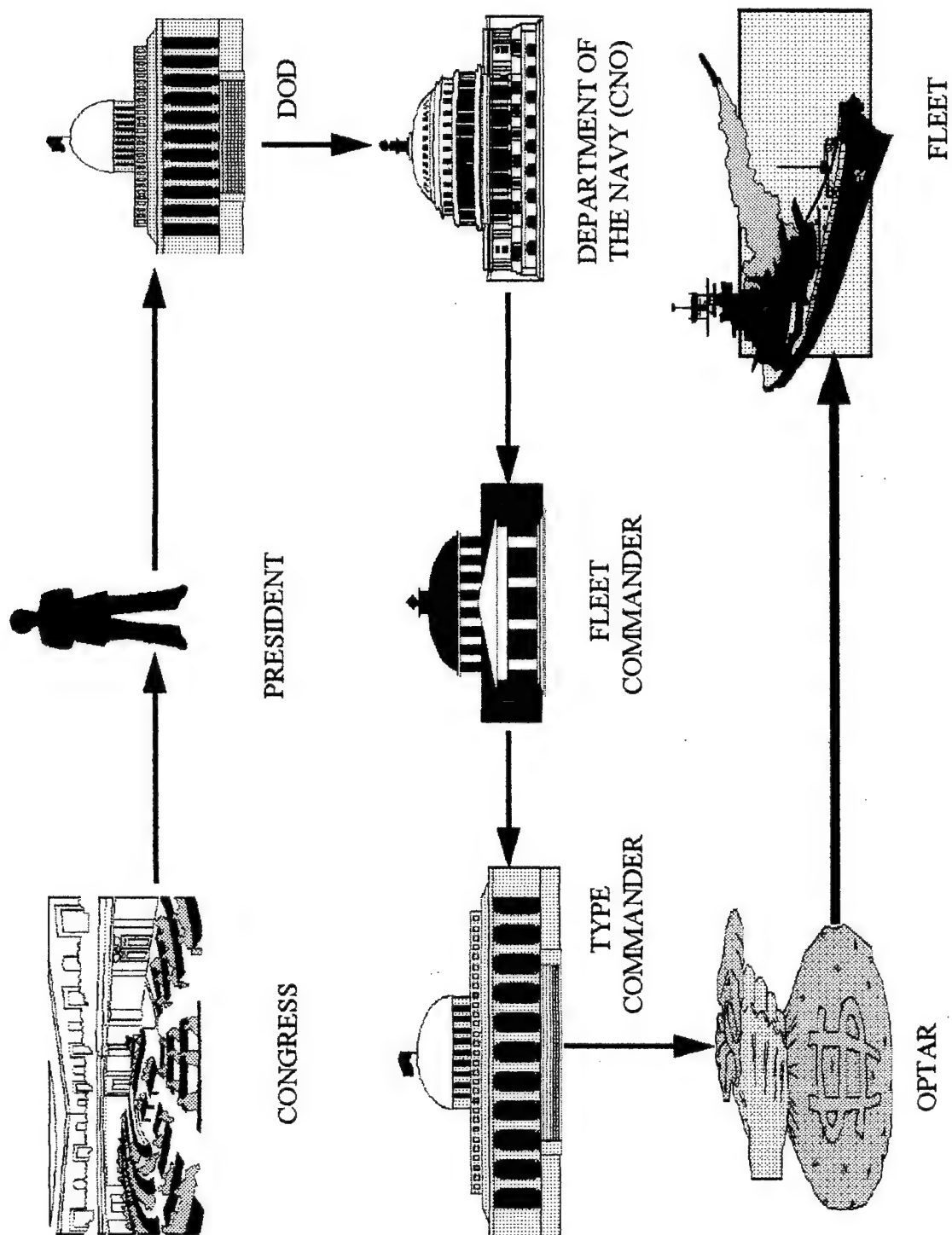


Figure 2.3 Operations and Maintenance Navy (OM&N)

Flow of Funds

Some activities may receive a variety of OPTARs besides the S&E OPTAR. These OPTARs could include the following:

- Reimbursable OPTARs which are used to fund a requirement, work or services to another Type Commander or government department as directed by the individual Type Commander.
- Repair of Other Vessels (ROV) OPTARs commonly used by tender and repair ships to finance the material and services used in the repair of other ships.
- Aviation Fleet Maintenance OPTARs which are used by carriers, amphibious assault ships and Marine air groups to cover aircraft maintenance.
- Flight Operations (FLTOPS) OPTARs which are used by Aviation Squadrons for flight operations maintenance.
- Temporary Additional Duty (TAD) OPTARs used for the funding of travel requirements in a particular command.

2. OPTAR Reporting and Accounting

OPTAR grants are available for obligations only during the current fiscal year in which they are granted (1 October through 30 September). During this period and for sixty months after this period, expenditures and cancellations against these funds can be received by the OPLOC and processed to the official accounting records.

a. Unfilled Order Documents

An unfilled order document is a copy of a requisition for material or service which is "chargeable" to the Operating Target (OPTAR). It is also commonly referred to as an obligation and is maintained in the Unfilled Order File or internal financial holding file aboard the ship until transmission to the OPLOC for official accounting. Unfilled orders are transmitted on a biweekly basis with the OPTAR transmittal report.

The OPTAR transmittal report and detailed unfilled orders are forwarded to the OPLOC on the 15th and last day of the month. [Ref. 7: p. 4-49] In most cases, the transmittal is forwarded via automated media including file transfer via the Streamline Automated Logistics Transmission System (SALTS) electronic bulletin board, magnetic tape, floppy diskettes and in some cases hard copy detailed listings. In the case of DBOF activities, summary unfilled order documents are provided to the OPLOC to record the value of unfilled orders managed for the appropriate OPTAR account. DBOF activities do submit detailed unfilled orders for service related transactions not processed through DBOF on a monthly basis for official accounting.

b. Detailed Cancellation Documents

Periodically, cancellation requests may be submitted by a ship for material no longer required and confirmed cancellation status may be received by the ship. Once confirmed cancellation status has been received for a previously obligated requirement, the cancellation will create a transaction which will record a deobligation of funds. The cancellation/deobligation transaction will be recorded to the Financial Holding File (FHF) for subsequent transmission during the next OPTAR transmittal to the OPLOC. Cancellation transactions which create a deobligation of funds are transmitted with the biweekly obligational data via the OPTAR transmittal on the 15th and last day of each month.

c. Budget OPTAR Report (BOR)

Budget OPTAR reports are submitted for each category of OPTAR and for each fiscal year in which funds have been allocated, obligated, expended or canceled. The Budget OPTAR report (BOR) summarizes obligations, adjustments or differences and gross adjusted obligations for the fiscal year and OPTAR being managed. The financial data reflected on the BOR is summarized by a two-digit code called a fund code or expense element.

The fund code listed on the BOR provides the manager a summary of obligations, differences and gross adjusted obligations for the fiscal year to date for that category of expense for goods and services for a ship. In addition, the BOR provides the Type Commander a summary by fund code of the total amount of funds obligated for that OPTAR. The Type Commander will use the BOR as a "pulse point" in measuring the obligation rates for dollars allocated across all fleet units.

The Budget OPTAR Report is submitted monthly during the current fiscal year to the appropriate DFAS OPLOC and Type Commander. Once the current fiscal year has expired and no more obligations can be incurred, BORs must continually be submitted only when changes occur with cancellations and/or differences received after the financial reconciliation process until the appropriation lapses. Additional management information may be required to be submitted with the BOR depending on Type Commander financial guidance. An example of some data provided after the summary data by fund code or expense element includes:

- The value of charter and hire services in foreign ports including when, what was procured and how much.
- The value of requisitions reviewed during the Material Obligation Validation (MOV) process.
- The value of cancellation requests submitted to the supply activities during the month being reported.
- Any projected shortfalls in OPTAR funding to include storeroom deficiencies not on hand or on order and other funding shortfalls.

The Budget OPTAR Report (BOR) serves as the official reporting of cumulative gross adjusted obligations from the ship to the TYCOM and appropriate OPLOC. It serves as a pulse point to measure the financial management of funds allocated to fleet units for procurement of goods and services under OM&N accounting. The cumulative values of all obligations, cancellations and financial adjustments reflected on the biweekly transmittals will be summarized on the BOR.

F. FINANCIAL RECONCILIATION PROCESS FOR GENERAL FUNDS MANAGEMENT

The designated fleet accounting offices, DFAS OPLOC Norfolk and San Diego, are the authorized accounting activities which perform the official accounting for Operating Targets granted to ships. [Ref. 7: p. 4-68] Part of the official accounting activity responsibilities for the general funds management process is the reconciliation of unfilled orders (obligations) and incoming expenditures for goods and services provided. During the reconciliation process, incoming expenditures are matched against corresponding unfilled orders by document number, quantity and extended dollar value. As a result of the reconciliation process, there are various listings which are produced and provided to the afloat financial manager for processing and subsequent return to the OPLOCs. Figure 2.4 illustrates the financial reconciliation process at the DFAS OPLOC and the production of the Aged Unfilled Order Listing (AUOL) and Summary Filled Order Difference Listing (SFOEDL).

1. Aged Unfilled Order Listing (AUOL)

The Aged Unfilled Order Listing is produced by the appropriate OPLOC as part of the financial reconciliation process. It is produced and distributed monthly to all OPTAR holders starting with the 4th month of the fiscal year and for every month thereafter until the 15th month (i.e., the third month after the end of a fiscal year). After the 15th month, the AUOL is produced quarterly and it lists all outstanding unfilled orders in document number sequence. [Ref. 7: p. 4-70]

For an unfilled order to appear on an AUOL, the requisition must be held by the OPLOC as an unfilled order for a minimum of 90 days without an expenditure being recorded against it. This is where we get the word "Aged" unfilled orders. Once an unfilled order is indicated as outstanding on the AUOL, 90 more days will pass before the unfilled order will be listed on the AUOL again. The exception would be if it was previously matched by an expenditure or a cancellation deobligated the funds.

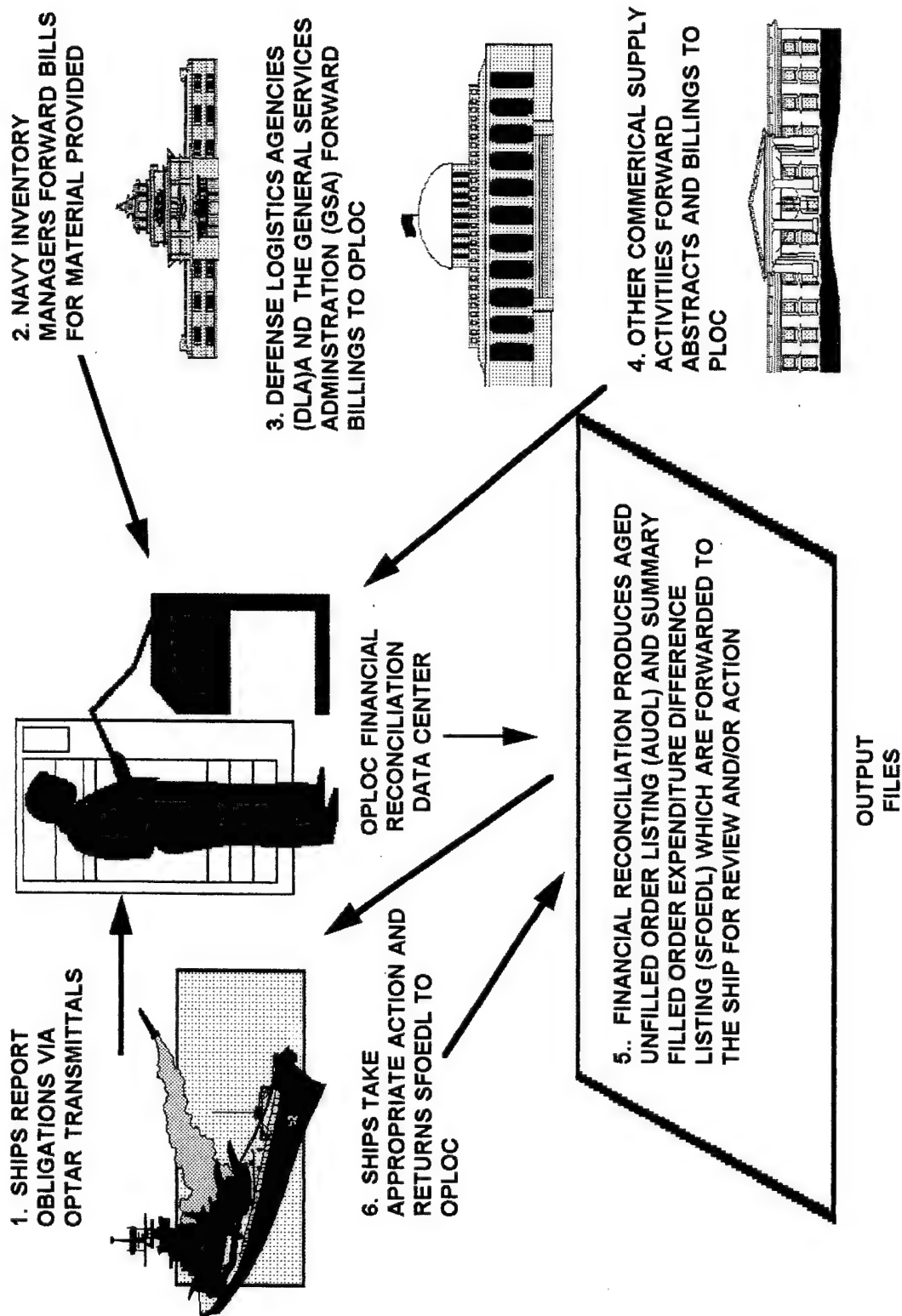


Figure 2.4 The General Funds (OPTAR) Financial Reconciliation Process

When the ship receives the AUOL, the financial clerk reviews the listing to determine if the requisition is still outstanding. If the requisition is outstanding, no action is required. If the requisition has been received and the receipt date is less than 60 days old, the transaction is documented with the receipt date on the listing but no further action is taken. If the requisition has been received and the receipt date is greater than 60 days old, the financial clerk may process an Administrative Cancellation to recapture the obligated amount. An Administrative Cancellation (ADCANC) can be processed even though the material was received from a valid source of supply. Type Commanders have recommended that Administrative Cancellations should not be taken until the material receipt date is greater than 90 days old. If a valid receipt of the material exists and the financial clerk processes an Administrative Cancellation prior to receipt of an expenditure at OPLOC, the money will be deobligated. If an expenditure later processes at the OPLOC, that expenditure will be listed as a debit (charge) difference on the Summary Filled Order Expenditure Difference Listing (SFOEDL).

2. Summary Filled Order Expenditure Difference Listing (SFOEDL)

The Summary Filled Order Expenditure Difference Listing (SFOEDL) is a result of the general funds financial reconciliation process. It is produced and distributed monthly for the first twenty-four months of the fiscal year and then quarterly thereafter, through the 33rd report month. [Ref. 7: p. 4-104]

Each SFOEDL received is a result of the failure to match the obligation recorded at the OPLOC and the incoming expenditure. The transactions listed on the SFOEDL will be in document number sequence and will list the obligation, followed by the expenditure, and any dollar value difference between the obligation and expenditure. Credit differences are a return of money because the obligation was greater than the expenditure. Debit differences represent an additional charge to the OPTAR and are a result of the expenditure being greater than the obligation.

Only transactions with an extended money value of \$100 or greater will reflect the detailed obligation, expenditure and resulting differences. Transactions containing a difference in extended money value less than \$100 will be reflected in the net difference values listed at the end of the SFOEDL.

a. SFOEDL Posting

Once the SFOEDL is received by the ship, the first thing that must be done is to post the net differences shown at the end of the listing. The overall net differences will be summarized by expense element or fund code to allow for ease of batch posting to the applicable shipboard file. All SFOEDLs must be posted upon receipt even if the total dollar value of the SFOEDL will exceed the remaining balance of funds within the shipboard OPTAR. If posting the SFOEDL will cause an over obligation of allocated funds, the Type Commander must be immediately notified. Steps should then be taken by the ship to help recapture unliquidated obligations which are no longer required to help offset the negative balance within the OPTAR.

b. SFOEDL Processing and Challenging

After the SFOEDL differences are posted to the shipboard financial records, each transaction must be reviewed to determine if the debit or credit difference is valid. To determine the validity of the difference, the financial clerk will compare the obligation and expenditure to available shipboard source documents (OPTAR transmittal and material receipt) to ensure the SFOEDL values listed are correct. If the difference is valid, the SFOEDL listing will be marked valid.

For those differences which appear to be invalid, the financial clerk will mark the difference with an appropriate challenge code and annotate the listing with any amplifying information which will help the OPLOC financial clerk in researching the challenge. SFOEDL challenge codes and their associated definitions are listed in Appendix 'C'.

Simply challenging a difference does not authorize the shipboard financial clerk to recapture the money. All differences will be investigated by the financial clerk at the OPLOC. Any subsequent credits or debits will be reflected by OPLOC on the next SFOEDL. In most cases, the shipboard financial clerk receives written feedback from the OPLOC financial clerk indicating whether credit is forthcoming or why the transaction challenged is valid. The shipboard clerk will maintain a manual log of all pending challenge requests until final resolution. This challenge log will be annotated with OPLOC responses when credit is granted or the difference is determined to be valid.

III. ADVANTAGES OF STANDARDIZED STORES ACCOUNTING ASHORE UNDER THE DEFENSE BUSINESS OPERATIONS FUND (DBOF)

A. GENERAL

This chapter examines the advantages of standardized stores accounting ashore under the Defense Business Operations Fund (DBOF). First a review will be provided of the Chief Financial Officer (CFO) compliancy requirements and the Defense Management Review Decision (DMRD) 910 impact on financial management. Second, the advantages of standardized stores accounting ashore for afloat activities using DBOF will be discussed. These will include Afloat Asset Visibility (AAV), a conceptualized afloat accounting process, standardization of stores accounting ashore under DBOF using the Material Financial Control System (MFCS) and standardization of software for inventory and financial management afloat under Relational-Supply (R-Supply). Third, there will be an overview of the use of the Material Financial Control System (MFCS) as the Navy's selection for inventory (stores) accounting ashore under DBOF. Next, will be a review of current cost avoidance programs and the use of excess material to satisfy urgent material requirements including the Force Inventory Management Analysis Reporting System (FIMARS), Consolidated Residual Asset Management Screening Information system (CRAMSI), Residual Asset Screening Program (RASP) and Residual Asset Management (RAM) programs. This review will include costs and benefits realized as a result of material redistributions to satisfy stock deficiencies and outstanding customer requisitions. Finally an analysis will be made of the success of a test involving redistribution of material excesses to satisfy material deficiencies among thirty-seven ships under Commander Naval Surface Force, Atlantic Fleet (COMNAVSURFLANT) using FIMARS. This data will be used to extrapolate costs and benefits which may be realized through implementation of MFCS.

B. THE CHIEF FINANCIAL OFFICERS (CFO) ACT AND DMRD 910 IMPACT ON FINANCIAL MANAGEMENT

1. The Chief Financial Officers Act Compliance Requirements

The Chief Financial Officers Act of 1990 was enacted into public law as an effort by the government to improve the general and financial management within the federal government. The overall goal was to provide a means for an ongoing effort by the Congress to strengthen financial management within the federal government and to standardize business practices whenever possible. [Ref. 8: p. 5-6] Some of the reasons for enacting the CFO act included the following:

- Financial management functions of the Office of Management and Budget needed to be significantly enhanced to provide direction and leadership in development of federal policy and guidelines for today's financial managers.
- Billions of dollars were being lost each year through fraud, waste and abuse, including mismanagement of hundreds of programs in the Federal Government.
- These losses could be significantly reduced through improved management, including improved internal controls, improved financial accounting methods and standardization of accounting systems.
- The Federal Government was in need of fundamental reforms in financial management. Some financial management systems were obsolete and inefficient. Information provided was not always complete, reliable, consistent or timely.

2. Key Accounting Requirements (KARs)

As a result of the CFO act, Key Accounting Requirements (KARs) have been adopted to assist in strengthening the accountability of financial management within the federal government. These KARs assist in providing a solid baseline in meeting standard objectives established under the Accounting System Data Processing Requirements outlined in DoD instruction 7000.14R, Financial Management Regulation, Volume 4. [Ref. 9] The following KARs apply:

a. General Ledger Control and Financial Reporting

This KAR requires an automated system for financial reporting to have general ledger control and to maintain an appropriate account structure approved by DoD. All financial reports will be generated from data resident in the DoD Standard General Ledger database.

b. Property and Inventory Accounting

This KAR requires the system to account in quantitative and monetary terms for the procurement, receipt, issue and control of plant property, equipment, inventory and material.

c. Accounting for Receivables

This KAR requires the system to account for all accounts receivable which result from any public indebtedness to the United States Government. In addition, an allowance for uncollectible accounts must be established. Collection will be recorded in the appropriate general ledger account. Advances from customers will be recorded as assets until the customer receives the goods or services or until contract terms are met and will be reconciled to the general ledger control accounts.

d. Accrual Accounting

This KAR requires accrual accounting to recognize transactions as they occur. Revenue is recognized when earned and not when received. Liabilities are recognized when incurred.

e. *System Controls (Fund and Internal)*

This KAR requires the system to show that appropriations are accounted for and to provide a description of fund distribution and control. Good fund control procedures prevent untimely liquidation of obligations, reduce unmatched expenditures and result in fewer undistributed disbursements. Adequate internal controls must be in place to prevent errors and irregularities. System security must include controls which protect hardware, software and documentation from physical damage and unauthorized access.

f. *Audit Trails*

This KAR requires that financial transactions are adequately supported with pertinent source documents and records. All transactions must be traceable to individual source records and detailed transactions maintained in the system. Audit trails allow the tracing of a transaction from its source to the resulting record.

g. *Cash Procedures and Accounts Payable*

This KAR requires the system to be designed to ensure timely payments based on properly approved disbursement documents. Payment procedures and processes must comply with the Prompt Payment Act. Cash discounts should be taken when determined to be financially advantageous to DoD. The accounting system utilized should reflect the appropriate payable for each accounting period based on requests for progress payments or on reasonable estimates of unbilled vendor performance. Accounts payable for services should be determined based on performance. Reasonable estimates of cost of services performed before the end of a reporting period should be made in the absence of invoices.

h. System Documentation

This KAR requires the accounting system to have adequate documentation, including user's manuals, system specifications and a functional description. The information should be detailed enough for tracing an entire transaction from initial authorization until final posting and reporting.

i. User Information Needs

This KAR requires the accounting system to be responsive to user information needs of quality, accuracy, timeliness and reliability. The accounting system must satisfy users' reporting requirements and be adequate in response to program financial managers and other users of the accounting information.

j. Budgetary Accounting

This KAR requires the system to support formulation of the budget, support budget requests and control budget execution. The system budget module must supply Navy major claimants and sub-claimants with budget recap information for use in current budget execution and future budget preparations.

3. Defense Management Review Decision (DMRD 910) Impact

In January 1991, the Defense Finance and Accounting Service (DFAS) was established by capitalizing the assets of the various DoD component's finance centers. DFAS was chartered to be the central agent within the Department of Defense for the standardization and consolidation of finance and accounting operations. [Ref. 10] The impact of DMRD 910 included

- Mandated cost savings through consolidations of finance centers and accounting functions.
- Capitalization of accounting functions for DoD which resulted in a more streamlined approach to governmental accounting.
- Consolidation of financial systems by standardizing business practices and developing one accounting system for afloat stores accounting and one for general funds management.

- Migration of future Automated Information Systems (AIS) and Corporate Information Management (CIM) Systems into fewer systems. This includes elimination of legacy systems and a movement to migratory systems which would standardize financial accounting.

C. WHAT ARE THE ADVANTAGES OF STANDARDIZED STORES ACCOUNTING ASHORE FOR AFLOAT ACTIVITIES USING DBOF?

1. Afloat Asset Visibility

One of the major obstacles in today's inventory and financial management environment is the inability to see what assets are held in afloat inventories. As pointed out in Chapter II, there are two types of inventories: DBOF and non-DBOF. In those cases where assets are held in DBOF related inventories, the capability exists to obtain asset information on allowances, excess on order/on hand and stock deficiency data. However, for non-DBOF activities, inventories are pre-expended as end-use items and are not readily visible on any automated system outside of the ship.

An overall objective would be the capitalization of all afloat inventories under DBOF. Some of the advantages of capitalization of inventories under DBOF include these: [Ref. 11]

- The opportunity to provide "Real-Time" visibility of all afloat assets.
- Providing for the redistribution capability of moving excess inventories to satisfy existing stock deficiencies and outstanding customer requirements afloat and ashore.
- Offsetting wholesale stock requisitions procured by inventory managers ashore with end-use excesses.

- Utilizing existing technology to provide available information on range and depth of allowed shipboard stock items. This would include the monitoring of readiness indicators concerning stock availability for future deployments.
- With Afloat Asset Visibility, managers can readily identify potential problem areas involving stock deficiencies and excesses on hand or on order.
- Validation of shipboard allowance data against centralized allowance databases ashore, resulting in improved accuracy.

2. A Conceptualized Afloat Accounting Process

If all afloat inventories were capitalized under DBOF, there are a number of advantages which would help in reducing workload afloat.

- Afloat supply operations would become Transaction Item Reporting (TIR) activities. In essence, they would perform the function of an afloat warehousing operation where they would receive, stow, issue, inventory and adjust inventory without conducting detailed stores accounting afloat.
- Transmission of detailed transactions conducted afloat would be transferred ashore through the use of Electronic Data Interchange (EDI) and would allow for a more "real-time" availability of inventory information.
- Most accounting functions would be conducted ashore using computers with artificial intelligence. This would reduce workload afloat and allow for better utilization of existing manpower to accomplish other tasks.
- Minimal financial management would be required afloat with the exception of memorandum accounting records used to ascertain the availability of OM&N funds or OPTAR for customer requirements.

3. Standardization of Stores Accounting Ashore Under DBOF Using the Material Financial Control System (MFCS)

The current plan calls for the creation of a single stores accounting system for afloat inventory and financial management. Standardized Stores Accounting Ashore under DBOF using the Material Financial Control System (MFCS) allows for:

- Combining multiple legacy systems used for stores (inventory) accounting and financial management for afloat activities.
- Adoption of standardized business practices afloat and ashore.
- Navy to take the initiative in providing an afloat alternative prior to DoD mandating another accounting system.
- Implementation of a robust, relational and compliant system for standardized stores accounting ashore for afloat activities.
- CFO act compliancy in changing exception processing thresholds for differences between obligations and expenditures, elimination of summary Money Value Only (MVO) transactions for obligations by fund code or expense element and standard general ledger accounting using established DoD/MILS standards.
- Multiple site record keeping. MFCS was designed to keep records for multiple sites. This means it would not be necessary to implement the system at each site. MFCS could be implemented at one site with other sites reporting as Transaction Item Reporting (TIR) activities all receipts, issues and adjustments to shipboard inventory.

4. Standardization of Software for Inventory and Financial Management Afloat under Relational Supply (R-Supply)

Today, there are a number of software applications currently in use for managing inventory and financial management afloat. These software applications include various elements of Shipboard Non-Tactical Automated data Processing (SNAP) programs including SNAP I/II/III, which interface with shipboard mainframe computers using Local Area Networks (LANs), and Micro-SNAP, which runs on a desk top computer in a PC-based environment.

Countless dollars are spent in the maintenance of these legacy software applications, including a large infrastructure maintained by the Central Design Agency (CDA) at the Navy Material Support Systems Office (NAVMASSO) in Chesapeake, Virginia for systems trouble shooting, changes and enhancements. A single system means lower training costs. The basic concepts used for material accounting are the same for both retail and wholesale accounting. By making R-Supply the standardized software application afloat, legacy systems can be eliminated, the latest technology can be used, and improvements in the areas of accountability for inventory and financial management for afloat activities can be realized.

D. AN OVERVIEW OF THE MATERIAL FINANCIAL CONTROL SYSTEM

1. MFCS Retail

The Material Financial Control System (MFCS) was originally designed by NAVSUP to improve Inventory Control Point (ICP) wholesale material and financial accounting operations, integrate the business operations of the ICP, and correct Department of Defense Instruction 7000.14R Financial Management Regulation (FMR) and Chief Financial Officer (CFO) accounting system compliancy deficiencies. [Ref. 12] The Defense Business Operations Fund (DBOF) Corporate Board selected MFCS as an interim migratory system for the Navy wholesale supply management business area in December 1994. Additionally, MFCS was selected

in November 1995 to perform retail stores accounting afloat and ashore by the Assistant Secretary of the Navy for Financial Management and Comptrollership (ASNFM&C) and the Director of the Defense Finance and Accounting Service Headquarters (DFAS HQ). The proposed development project to integrate ashore and afloat retail stores accounting into MFCS is known as MFCS Retail. MFCS Retail is essential to Navy efforts to transfer afloat accounting workload ashore.

2. Why Use MFCS as the Retail System?

The design behind MFCS was based on DoD/MILS standards for accounting and financial reporting. Using these standards, the MFCS system can process any type of material transaction, whether it be for retail or wholesale. The following is a list of some additional advantages for using MFCS:

- MFCS provides strict accountability of funds used to procure material and services. It ensures that the funds are used as authorized and provides a tracking mechanism to ensure all transactions are appropriately accounted for under general ledger accounting.
- MFCS is a state of the art system. It was designed to utilize the most current hardware/software technology available for inventory and financial management.
- MFCS uses MACRO software which allows a single transaction to complete all validations required for that transaction and updates all Integrated Database records before going to the next transaction. If a transaction fails at any point in the process, no records are updated until the transaction is corrected.
- MFCS provides for positive funds control via the Funds Certification MACRO. Funds certification ensures that funds can only be obligated if available and does so whether it is another system requesting the funds or a person sitting at a terminal manually processing an obligation. Previous accounting methods allowed for transactions to process even though no obligation was available.

- More data is available for the Budget Project (BP) Managers. Remote terminals allow the BP managers to access more information with MFCS than was available on legacy accounting systems. Today, a BP manager will only see the summary general ledger data in the central database. This data is normally 30-45 days old because of the monthly reporting cycles of current retail systems. MFCS and its real-time capabilities will allow BP managers to see general ledger data for their budget project on a real-time basis. Not only will they be able to see summary data real-time, but they will also have access to the detail data which made up the summary information. This should allow the BP manager to make better decisions with the tighter dollars available to them today.
- Using MFCS both for retail and wholesale inventory and financial management also means reduced costs in life cycle support for the program. Customer service support will be enhanced through a single system used for stores accounting. When mandated changes are required through the Central Design Agency (CDA), only one system would require changing and updating vice multiple systems today.

E. SUCCESS OF CURRENT COST AVOIDANCE PROGRAMS

1. The Force Inventory Management Analysis and Reporting System (FIMARS)

The Force Inventory Management Analysis and Reporting System (FIMARS) was developed in the spring of 1994 by Commander Naval Surface Force, Atlantic Fleet, (COMNAVSURFLANT) active and reserve personnel for use in asset visibility for all afloat inventories. Using an offline utility program called the Force Inventory Transmission System Download (FITSDL) procedure, stock record information including on hand, allowances, stock due, excess on order, excess on

hand, and stock deficiency data was extracted from shipboard stock record and requisition files and forwarded to the Type Commander for input into a centralized PC-related database called FIMARS.

The initial objective of FIMARS was to provide asset visibility across ships within COMNAVSURFLANT to help in satisfying urgent material requirements requisitioned by the fleet where no wholesale system assets were readily available for issue. In particular, the Casualty Reporting (CASREP) section of the Type Commander required the use of a tool to readily review shipboard assets to satisfy material deficiencies that impacted shipboard performance.

The central database (FIMARS) was updated bi-weekly with FITSDL changes from the shipboard database. The data extract was transmitted to an ashore electronic bulletin board maintained by the Navy Inventory Control Point, Philadelphia (NAVICP (P)) via satellite communications using the Streamlined Automated Logistics Transmission System (SALTS). Through this method, the Type Commander had asset visibility across all ships which had the FITSDL utility providing they transmitted the data ashore bi-weekly as instructed. Soon, the Type Commander discovered that there were a number key indicators which could be measured in the area of inventory and requisition file management by reviewing summary data by ship, ship class, or other groupings as desired. Figure 3.1 illustrates the flow of FITSDL data to the centralized FIMARS database.

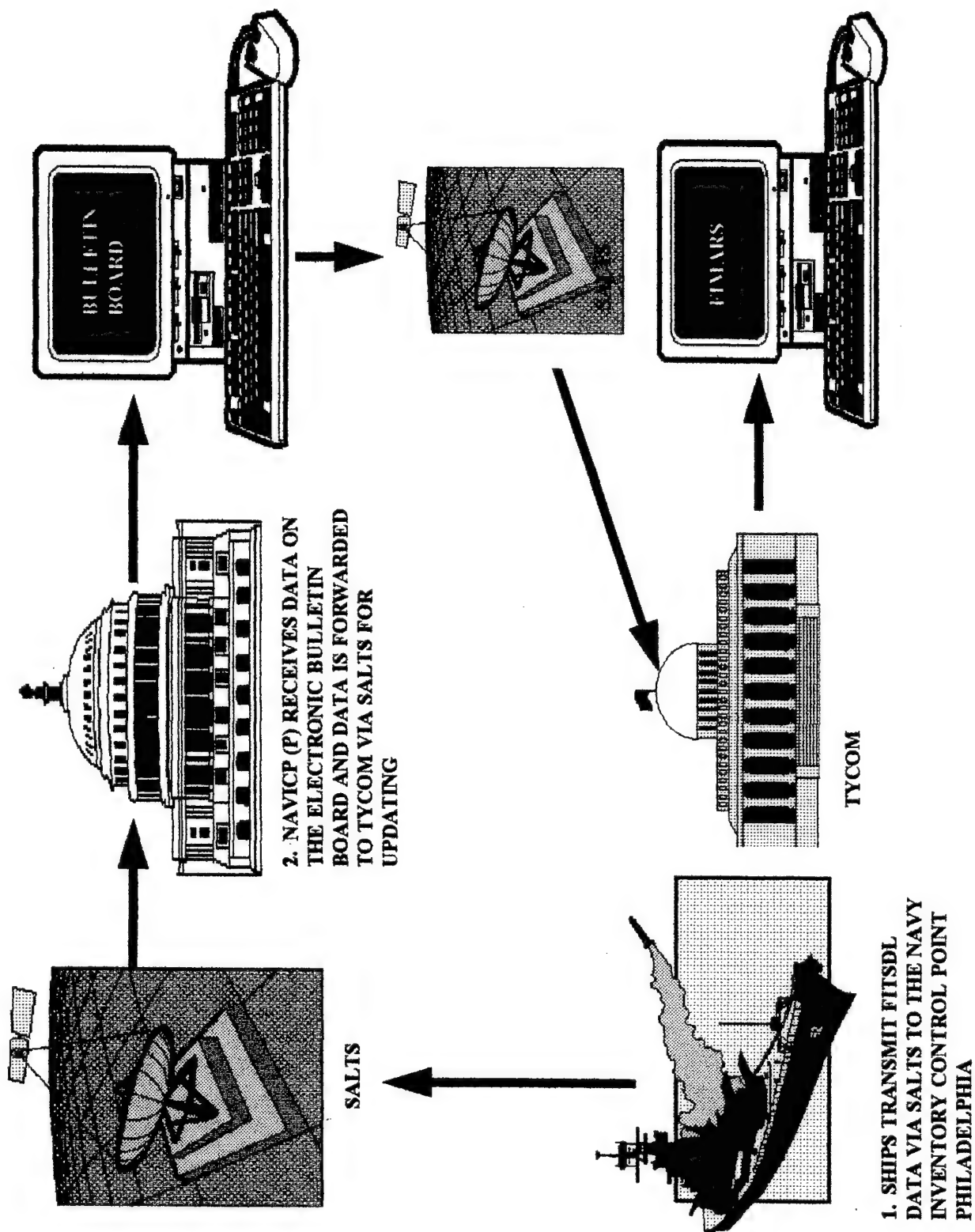


Figure 3.1 Flow of FITSDL Data to FIMARS

2. Consolidated Residual Asset Management Screening Information (CRAMSI) System

The CRAMSI system is a centralized database of all excess end-use inventories maintained ashore which were previously listed as allowed items onboard ships but were later determined to be excess and turned in to various Type Commander owned sites for potential redistribution. These CRAMSI sites became known as Type Commander "Gold Piles". The idea behind the "Gold Piles" was for the Type Commander to return excess material to the wholesale system for credit. However, if the wholesale system would not provide credit, then the Type Commander would maintain the excess material for potential redistribution. Ships could screen their particular Type Commander CRAMSI system or call other CRAMSI sites for possible redistribution of excess material ashore to fill a stock deficiency or customer requirement afloat at no cost.

In 1990, all CRAMSI sites were linked to a central database maintained by the Naval Sea Logistics Center (NAVSEALOGCEN) in Mechanicsburg, Pennsylvania resulting in a consolidation of information on all residual Type Commander and Naval Sea Systems Command (NAVSEA) excess assets. CRAMSI has grown to 19 residual sites across the country with an inventory value of over \$500 million dollars. Users can call, FAX, transmit requests via e-mail on the Streamline Automated Logistics Transmission System (SALTS) or log-in to CRAMSI from a remote site to check the availability of material to satisfy existing requirements at no cost. [Ref. 13]

In 1993, COMNAVSURFLANT and NAVSEALOGCEN implemented CRAMSI afloat, which automated screening of trial reorders from the Shipboard Non-tactical Automated data Processing (SNAP) system. Trial reorders were forwarded by the ships via mechanized media (floppy diskette, SALTS or magnetic tape) and screened against CRAMSI for potential fills.

In FY 95, over 60,000 line items were screened by COMNAVSURFLANT ships using CRAMSI afloat with resultant savings of over \$13 million dollars. An additional \$4.1 million dollars was saved by screening ships outstanding requisition files against CRAMSI. [Ref. 13]

3. Residual Asset Management (RAM) Program

The Residual Asset Management (RAM) program was an enhancement to the existing use of CRAMSI afloat. RAM was developed by the Navy Inventory Control Point (NAVICP) in Mechanicsburg, PA. RAM provides a new and even more effective method to automate the screening of residual asset inventories at the time of requisition submission from the ship to the ashore supply point of entry. Currently, RAM is being prototyped on the east coast at the Fleet Industrial Supply Center (FISC) in Norfolk, VA. Under RAM, all priority group 2 or 3 requisitions submitted by end-use "V" service code ships (Atlantic Fleet) are automatically screened against RAM with online visibility of all CRAMSI assets. If the material is available under RAM, requisitions are then passed to the appropriate CRAMSI site for free issue. A status transaction is then forwarded to the requisitioner, indicating that the requisition has been passed to RAM for free issue. A document identifier "AE1" with RAM as the routing identifier provides the requisitioner "BN" status, which deobligates the money outstanding for the material requisitioned but allows further tracking of the requisition until the requesting ship receives the material from the CRAMSI site.

Through this entire process, requisitions submitted to the prototype point of entry (FISC Norfolk, VA) are screened via RAM prior to passing the requisition onward through the normal supply processing point. Several key advantages are provided through RAM.

- The value of residual assets are recognized by the ability to satisfy fleet requirements. RAM forwards requirements not available to normal supply channels for procurement.

- RAM builds on the success of CRAMSI by having online total asset visibility of the "Gold Piles", which may help avoid obligation and expenditure of current limited OM&N funding.
- RAM moves asset visibility to an online service to help benefit the fleet and reduce workload afloat through asset redistribution.

4. Residual Asset Screening Program (RASP)

The Residual Asset Screening Program (RASP) is another step in utilizing residual or excess assets maintained ashore under CRAMSI as pre-expended inventory awaiting material redistribution. Once the fleet had the capability to screen excess "Gold Piles" prior to requisitioning (CRAMSI) and during requisitioning (RAM), there was a need to develop a program which could screen Navy wholesale requirements against the residual excesses for potential credit to Type Commanders and the NAVSEA procurement accounts. As pointed out by a Naval Audit Service Report finding in 1992 on Type Commander excesses, there was a need to develop a program that would better utilize excess assets held by end-users. The screening process had to be automated so that wholesale requirements could be screened against excesses and automatic credit could be provided for that material transferred from the pre-expended excess "Gold Pile" to the wholesale system.

The RASP program offers the holder of the material credit for material which is needed by the Navy Inventory Control Point to satisfy customers backorders and/or stock buys. The credits are provided in the form of cash returns to the appropriate OM&N appropriation. These credits are then used to fund stock deficiency shortfalls and other requirements for fleet units. An example of the success of the RASP program can be illustrated for COMNAVSURFLANT. In FY 95, over 1,050 items were offered for credit to the Navy wholesale system, resulting in the wholesale system providing a return to the Type Commander of \$6.1 million dollars. [Ref. 14]

Currently, RASP only screens the Navy wholesale stock position to determine items for potential credit. There is some study underway to determine if RASP could also screen excesses against Defense Logistics Agency (DLA) and General Service Administration (GSA) wholesale system requirements for potential credit. Table 3.1 represents COMNAVSURFLANT Cost Savings Results for FY 95/96 as a result of excess material redistributions and turn-ins ashore from material maintained at the Fleet Integrated Logistics Overhaul (ILO) site in Portsmouth, VA for a total of \$56,786K dollars in FY 95 and \$2,851K dollars for FY 96 through 31 December.

COMNAVSURFLANT COST SAVING RESULTS FY 95/96				
FISCAL YEAR 95 1 OCT 94 - 30 SEPT 95			FISCAL YEAR 96 1 OCT 95 - 31 DEC 95	
ISSUED TO	LINE ITEMS	\$ VALUE IN THOUSANDS	LINE ITEMS	\$ VALUE IN THOUSANDS
SHIPS	3,462	\$21,400	205	\$1,000
TYCOM ILO/ILR DEFICIENCIES	395	\$1,800	3	\$8
SURFPAC	912	\$6,000	126	\$742
NAVSEA INITIAL OUTFITTING	2,444	\$12,300	138	\$996
RASP (NOTE 1)	1,393	\$14,800	0	\$0
OTHER	100	\$486	24	\$105
GRAND TOTALS	8,706	\$56,786	496	\$2,851
NOTE 1: RASP SAVINGS REPRESENTS MATERIAL OFFERED FOR CREDIT. NAVICP PROVIDED \$6.1 MILLION DOLLARS IN CREDIT DURING FISCAL YEAR 95.				

Table 3.1 COMNAVSURFLANT Cost Savings Results for FY 95/96

F. AN ANALYSIS OF THE FORCE INVENTORY MANAGEMENT ANALYSIS AND REPORTING SYSTEM (FIMARS) AND POTENTIAL COST BENEFITS

1. An Overview

In reviewing the potential advantages of standardizing stores accounting ashore under DBOF, data was extracted from COMNAVSURFLANT's FIMARS database in order to provide a broad picture of potential benefits. However, prior to this review, there are several assumptions that are understood in managing inventory afloat that are not always accurate. These assumptions are as follows:

- All material allowances within a ship's database are accurate. This is not true. Initial allowances are established at time of the ship's commissioning. Subsequent changes in range (new items) and depth (increases or decreases to existing allowances) are managed by the Navy Inventory Control Point (NAVICP). However, the users on each ship have the capability to change allowances within the shipboard database. Therefore, allowances could be inflated or deflated. Additionally, the ship may be missing allowance data changes that had been forwarded to the ship for processing on previous cycles.
- Excesses and/or deficiencies could be inflated or deflated if the allowance information is inaccurate. In most recent shipboard allowance validations, evidence has indicated that allowances have been higher than new allowance computation models would allow today. It is also important to note that an item may appear to be excess when, in fact, the ship failed to process an allowance change to the database.
- In some cases, excesses or deficiencies may appear on the database erroneously because of substitute relationships between allowed and non-allowed items not being properly linked within the database. Substitute linkage must be properly built within the database.

- Assumptions are that the price reflected within the stock record battery aboard the ship is the correct price for an item. This is not always true. Although some pricing information is updated when allowance information is loaded via Automated Shore Interface (ASI) electronic media or when material is ordered, there is no monthly change notice which updates all prices for end-use ships on a regular basis.

2. A Review of FIMARS Data for COMNAVSURFLANT March 96

Table 3.2 represents a summary report of FIMARS force data for 95 ships under COMNAVSURFLANT. The data is provided as an estimate of the amount of line items and dollar values which are managed in inventories afloat and which could be capitalized under DBOF. The FIMARS database includes eight activities currently holding inventories under DBOF. The following explanations are provided for a general understanding of the captions which are provided in summarizing FIMARS data:

- NSA Inventory On Hand: Represents the dollar value and line item count of all odd cognizance symbol material carried on a ship as Navy Stock Account material.
- APA Inventory On Hand: Represents the dollar value and line item count of all even cognizance symbol material carried on a ship as Appropriation Purchases Account material.
- Total Inventory On Hand: Represents the total dollar value and line item count of all inventory held onboard a ship.
- NSA Material On Order: Represents the total dollar value and line item count of all Navy Stock Account material which is on order.
- APA Material On Order: Represents the total dollar value and line item count of all Appropriations Purchases Account material which is on order.
- Total Material On Order: Represents the total dollar value and line item count of all material on order under NSA and APA.

COMNAVSURFLANT FIMARS DATA MARCH 96 (95 SHIPS)		
CATEGORY	DOLLAR VALUE IN THOUSANDS	LINE ITEMS
NSA INVENTORY ON HAND	\$1,232,939	1,538,267
APA INVENTORY ON HAND	\$61,809	5,378
TOTAL INVENTORY ON HAND	\$1,294,748	1,543,645
NSA MATERIAL ON ORDER	\$198,963	104,580
APA MATERIAL ON ORDER	\$23,316	2,568
TOTAL MATERIAL ON ORDER	\$222,279	107,148
TOTAL ON HAND WITH DEMAND	\$371,921	384,837
TOTAL ON HAND WITHOUT DEMAND	\$922,827	1,158,808
PERCENT ON HAND WITH DEMAND	28.73%	24.93%
PERCENT ON HAND WITHOUT DEMAND	71.27%	75.07%
TOTAL ON ORDER WITH DEMAND	\$54,838	35,420
TOTAL ON ORDER WITHOUT DEMAND	\$167,441	71,728
EXCESS TO HIGH ON HAND	\$111,144	194,867
EXCESS TO HIGH ON ORDER	\$29,692	9,445
PERCENT EXCESS TO HIGH ON HAND	8.58%	12.62%
PERCENT EXCESS TO HIGH ON ORDER	2.29%	0.61%
EXCESS ON HAND WITHOUT DEMAND	\$80,270	131,518
EXCESS ON ORDER WITHOUT DEMAND	\$25,064	5,338
PERCENT EXCESS ON HAND WITHOUT DEMAND	72.22%	67.49%
PERCENT EXCESS ON ORDER WITHOUT DEMAND	84.41%	56.52%
INVENTORY DEFICIENCIES TO HIGH	\$84,834	39,711
INVENTORY DEFICIENCIES TO HIGH WITH DEMAND	\$33,665	19,740

Table 3.2 Summary Report of FIMARS Force Data for March 96

- **Total On Hand With Demand:** Represents the dollar value and line item count of items carried onboard a ship which experienced at least one demand in the last 24 months by a particular ship.
- **Total On Hand Without Demand:** Represents the dollar value and line item count of items carried onboard a ship which experienced no demand in the last 24 months by a particular ship.
- **Percent On Hand With Demand:** Represents the dollar value and line item percent of items on hand with demand divided by the total dollar value and line items in inventory.
- **Percent On Hand Without Demand:** Represents the dollar value and line item percent of items on hand with no demand in the last 24 months divided by the total dollar value and line items in inventory.
- **Total On Order With Demand:** Represents the dollar value and line item count of all items with a due which experienced at least one demand in the last 24 months by a particular ship.
- **Total On Order Without Demand:** Represents the dollar value and line item count of all items with a due which have not experienced any demand in the last 24 months by a particular ship.
- **Excess to High On Hand:** Represents the dollar value and line item count of those items on hand in excess to the allowance or high limit (Requisitioning Objective), whichever is higher.
- **Excess to High On Order:** Represents the dollar value and line item count of those items on order in excess to the allowance or high limit (Requisitioning Objective) whichever is higher.
- **Percent Excess to High On Hand:** Represents the percent of the dollar value and line item count which is excess on hand divided by the total dollar value and line item count of total inventory on hand.
- **Percent Excess to High On Order:** Represents the percent of the dollar value and line item count which is excess on order divided by

the total dollar value and line item count of total inventory on hand.

- **Excess On Hand Without Demand:** Represents the dollar value and line item count of those items which are excess without any demand in the last 24 months on a particular ship.
- **Excess On Order Without Demand:** Represents the dollar value and line item count of those items which are excess due without any demand in the last 24 months on a particular ship.
- **Percent Excess On Hand Without Demand:** Represents the percent of the dollar value and line item count of excess on hand receiving no demand within the last 24 months on a particular ship.
- **Percent Excess On Order Without Demand:** Represents the percent of the dollar value and line item count of excess due receiving no demand within the last 24 months on a particular ship.
- **Inventory Deficiencies to High:** Represents the dollar value and line item count of those items which are not on hand and/or on order and are deficient to the allowance or high limit (Requisitioning Objective) whichever is higher. Substitute stock numbers are considered prior to the calculations of any deficiency.
- **Inventory Deficiencies to High With Demand:** Represents the dollar value and line item count of those items which are not on hand and/or on order and are deficient to the allowance or high limit (Requisitioning Objective) that have experienced at least one demand in the last 24 months.

Table 3.3 represents a summary report of FIMARS data on 37 end-use ships selected for potential material redistribution. Table 3.4 represents the overall impact on the changes in excesses and deficiencies if all material was capitalized under DBOF and excesses were used to satisfy existing deficiencies among the 37 ships. A list of the 37 ships selected can be found in Appendix 'D'.

COMNAVSURFLANT FIMARS DATA MARCH 96 (37 SHIPS) PRIOR TO REALLOCATION OF EXCESSES		
CATEGORY	DOLLAR VALUE IN THOUSANDS	LINE ITEMS
NSA INVENTORY ON HAND	\$533,284	584,288
APA INVENTORY ON HAND	\$36,979	4,331
TOTAL INVENTORY ON HAND	\$570,263	588,619
NSA ON ORDER	\$65,058	37,848
APA ON ORDER	\$17,080	1,804
TOTAL ON ORDER	\$82,138	39,652
TOTAL ON HAND WITH DEMAND	\$128,487	129,824
TOTAL ON HAND WITHOUT DEMAND	\$441,776	458,795
PERCENT ON HAND WITH DEMAND	22.53%	22.06%
PERCENT ON HAND WITHOUT DEMAND	77.47%	77.94%
TOTAL ON ORDER WITH DEMAND	\$60,140	12,144
TOTAL ON ORDER WITHOUT DEMAND	\$21,998	27,508
EXCESS TO HIGH ON HAND	\$31,944	43,921
EXCESS TO HIGH ON ORDER	\$10,120	4,043
PERCENT EXCESS TO HIGH ON HAND	5.60%	7.46%
PERCENT EXCESS TO HIGH ON ORDER	1.77%	0.69%
EXCESS ON HAND WITHOUT DEMAND	\$21,286	25,135
EXCESS ON ORDER WITHOUT DEMAND	\$7,549	2,534
PERCENT EXCESS ON HAND WITHOUT DEMAND	66.64%	57.23%
PERCENT EXCESS ON ORDER WITHOUT DEMAND	74.59%	62.68%
INVENTORY DEFICIENCIES TO HIGH	\$29,933	12,216
INVENTORY DEFICIENCIES TO HIGH WITH DEMAND	\$7,075	5,427

**Table 3.3 Summary Report of FIMARS Data for 37 Ships for March 96
Prior to Reallocation of Excesses to Satisfy Deficiencies**

COMNAVSURFLANT FIMARS DATA MARCH 96 (37 SHIPS) AFTER REALLOCATION OF EXCESSES					
CATEGORY	DOLLAR VALUE IN THOUSANDS BEFORE	LINE ITEMS BEFORE	DOLLAR VALUE IN THOUSANDS AFTER	LINE ITEMS AFTER	DOLLAR VALUE REDUCTION
EXCESS TO HIGH ON HAND	\$31,944	43,921	\$27,000	40,651	\$4,944
EXCESS TO HIGH ON ORDER	\$10,120	4,043	\$7,850	3,374	\$2,270
EXCESS TOTALS ON HAND PLUS EXCESS ON ORDER (NOTE 1)	\$42,064	47,964	\$34,850	44,025	\$7,214
PERCENT EXCESS TO HIGH ON HAND	5.60%	7.46%	4.73%	6.90%	0.56%
PERCENT EXCESS TO HIGH ON ORDER	1.77%	0.69%	1.38%	0.57%	0.12%
EXCESS ON HAND WITHOUT DEMAND	\$21,286	25,135	\$17,687	23,493	\$3,599
EXCESS ON ORDER WITHOUT DEMAND	\$7,549	2,534	\$5,856	2,100	\$1,693
PERCENT EXCESS ON HAND WITHOUT DEMAND	66.64%	57.23%	65.51%	57.79%	-0.56%
PERCENT EXCESS ON ORDER WITHOUT DEMAND	74.59%	62.68%	74.60%	62.24%	0.44%
INVENTORY DEFICIENCIES TO HIGH (NOTE 1)	\$29,933	12,216	\$22,399	7,751	\$7,534
INVENTORY DEFICIENCIES TO HIGH WITH DEMAND	\$7,075	5,427	\$4,560	2,839	\$2,588
NOTE 1: TOTAL EXCESS ON HAND PLUS EXCESS ON ORDER REDUCED BY \$7,214K DOLLARS. DEFICIENCIES REDUCED BY \$7,534K DOLLARS. THE DIFFERENCE OF \$320K DOLLARS IS BECAUSE PRICES FOR DEFICIENCIES WERE HIGHER THAN PRICES FOR EXCESSES. OVERALL AVERAGE REDUCTION IN EXCESSES AND DEFICIENCIES IS \$7,374K DOLLARS.					

**Table 3.4 Summary Report of FIMARS Data for 37 Ships for March 96
After Reallocation of Excesses to Satisfy Deficiencies**

3. An Analysis of Successful Reallocation of Material Excess On Hand and Excess On Order

In reviewing Table 3.4, the total excess on hand plus excess on order was reduced by a total of \$7,214K dollars or 17% of the total excess value of \$42,064K dollars. The deficiencies were reduced by \$7,534K dollars or 25% of the total inventory deficiencies to high value of \$29,933K dollars. This sample test only included 37 ships within COMNAVSURFLANT. If we were to apply the same rate of return for material redistribution of 17% reduction in excesses and 25% reduction in deficiencies across the total FIMARS database for COMNAVSURFLANT, the reduction in excesses would be \$23,942K dollars (the force excess on hand is \$111,144K plus excess on order of \$29,692K = a total of \$140,836K dollars X 17% = \$23,942K dollars). The reduction in deficiencies would be \$21,208K dollars (The force deficiency to high of \$84,834K dollars X 25% = \$21,208K dollars).

Although the total reallocation of excesses to satisfy deficiencies across the entire force may not be ideal, the test indicates that significant savings or cost avoidance could result with some reallocation of excesses to satisfy deficiencies not on hand or on order. Placing all inventory under DBOF would allow the ships to pay for those items which are consumed and not part of their respective inventories. The Material Financial Control System (MFCS) could provide total asset visibility and redistribute material within the fleet at the cost of transportation. MFCS could also incorporate the benefits of selling excess material to the wholesale supply system for credit so that future DBOF costs could be reduced to the customers.

This test did not consider what excesses could be used to satisfy existing outstanding due requisitions for stock or customer requirements. Additionally, this test only reviewed one Type Commander's database under FIMARS (COMNAVSURFLANT). There are six Type Commanders, and efforts are currently underway to provide FIMARS to these Type Commanders in the future.

IV. RECONCILIATION OF AFLOAT INVENTORIES NOT UNDER DBOF

A. GENERAL

This chapter examines the steps required in allowance validation of the Coordinated Shipboard Allowance List (COSAL) with the On Board Repair Parts (OBRP) prior to capitalizing end-use inventories into DBOF. This examination will include what steps are necessary in reconciliation of afloat inventories with allowances established by the Navy Inventory Control Point (NAVICP) and whether there would be a windfall profit for DBOF as a result of capitalization. First a review will be made of the establishment of shipboard allowances in the COSAL and subsequent range and depth additions or deletions to this allowance document. Second, there will be a review of the need to reduce inventory afloat under the Defense Management Review Decision (DMRD) 981 initiative to reduce inventory investment afloat with negligible impact on readiness and sustainability. This review will include an analysis of the Fleet Logistics Support Improvement Program (FLSIP) and the overall impact of the new .5FLSIP plus COSALS. A discussion of some concerns and facts involving the use of the .5FLSIP allowance model and an analysis of the success of .5FLSIP COSAL changes on USS Peterson and USS San Jacinto will be presented in this section. Third, a review will be made of the requirement to fund allowed material deficiencies not on hand or on order and the potential impact on Operation and Maintenance, Navy (O&MN) funds prior to DBOF conversion. This review will include discussion on offsetting funding shortfalls for deficiencies with the windfall profits made by selling or redistributing excess material maintained in end-use inventories afloat. Finally, an overview will be provided of the establishment of an Aviation Coordinated Allowance List (AVCAL) under DBOF for shipboard Light Airborne Multi-Purpose System (LAMPS) helicopter Pack-Up Kit (PUK) support currently managed offline on a stand-alone PC based system called the Aviation Inventory Management System (AIMS).

B. COORDINATED SHIPBOARD ALLOWANCES (COSAL) ESTABLISHMENT AND CHANGES

1. Establishment of Initial Allowances for the COSAL

As pointed out in Chapter II, during the first phase of initial outfitting or new construction, the allowances are determined through a provisioning process referred to as the Coordinated Shipboard Allowance List (COSAL). The initial allowances are documented on an Allowance Parts List (APL) or Allowance Equipage List (AEL) as allowed On Board Repair Parts (OBRP).

To identify a ship's authorized allowances, all the repair parts listed on installed equipment Allowance Parts Lists (APLs) that are within the maintenance capability of the ship are passed through a computation process. [Ref. 5, p.1-6] The following models were approved by the CNO for use in allowance computations for shipboard authorized COSALs under the Fleet Logistics Support Improvement Program (FLSIP).

a. .25 FLSIP Model

The .25 FLSIP is a demand based model. In order to qualify for allowance computation, a repair part must have a Navy-wide predicted or actual failure rate of one or more demands in a four year period to compute for allowance. A simplified FLSIP formula is provided in the following equation:

$$UR = (POP \times BRF)/4$$

In this formula, UR is the usage rate which is an estimate of how often a part will be needed within a 90 day period. The POP represents the Population of the part on board the ship (i.e., installed in the equipment). The BRF represents the Best Replacement Factor. This is the predicted rate of replacement per year based on engineering estimates for new requirements or actual fleet reported usage. Dividing by 4 determines the expected usage for a 90 day period, which is the CNO established stocking level duration. [Ref. 5, p. 1-6]

b. MOD-FLSIP Model

The MOD-FLSIP model is a demand based model which improves support for equipment and systems essential to the primary mission of the ship. The model is used to establish insurance levels for material used to support the primary mission of the ship that did not meet the .25 FLSIP computation model. Those items showing a Usage Rate (UR) of .10 to .25 are considered for stocking at a Minimum Replacement Unit (MRU) of one each to ensure the item is there for potential issue if needed.

c. FLSIP .5 Plus Model

The FLSIP .5 plus model is the latest in a series of initiatives by the Navy Inventory Control Point (NAVICP) in reviewing allowance computations for material management in afloat inventories. This model is the latest model being used by NAVICP in allowance computation and reduces both the cost and count of storeroom items by removing low usage insurance spares while adding back particular maintenance and Casualty Report (CASREP) related items identified from fleet usage. More information concerning the FLSIP .5 plus model will be provided later in this chapter.

2. Range and Depth COSAL Allowance Changes

Once an initial COSAL has been implemented for a ship, COSAL changes become a part of the normal routine business as the shipboard configuration for equipment and spare parts evolves over the ship's life cycle. A range add is a complete addition of a spare part not previously carried as an allowed item. A range delete is a complete deletion of a spare part as an allowed item which was previously carried. Depth additions and deletions represent those transactions having an increase or decrease in the amount of material allowed for that particular repair part or stock number onboard a ship.

Ships receive routine range and depth allowance changes on a monthly Automated Shore Interface (ASI) tape provided by NAVICP. Periodically, a ship may receive an unsequenced ASI tape from the Type Commander or In-Service Engineering Activity (ISEA) as an interim allowance change to material carried in inventory. These allowance changes are subsequently processed to the ship's automated Supply and Financial Management (SFM) subsystem, called the Shipboard Non-tactical Automated data Processing (SNAP) system.

**C. THE DEFENSE MANAGEMENT REVIEW DECISION (DMRD) 981
INITIATIVE TO REDUCE INVENTORY AFLOAT AND .5 FLSIP Plus**

1. Defense Management Review Decision (DMRD) 981

DMRD 981 involves a series of 64 initiatives proposed by the Department of Defense (DoD) in reducing costs associated with the management and execution of the Navy's overall Operation and Maintenance, Navy (O&MN) budget. In particular, one initiative by the Navy under DMRD 981 was the task of reducing inventory investment and On Board Repair Parts (OBRP), with negligible impact on readiness and sustainability. Reducing inventory investment afloat could result in substantial cost reductions across the fleet, with an estimated total savings from FY 94 - FY 99 of \$183 million dollars. [Ref. 15] This initiative led to the establishment of a new COSAL provisioning model, referred to as .5 FLSIP plus, with the goal of reducing inventory investment on afloat platforms.

2. COSAL Allowance Reduction and .5 FLSIP Plus

Using the .5 FLSIP plus computation model for allowance development led to major strides in improving allowance validation and inventory management afloat. This initiative reduced the COSAL allowances by computing Storeroom Item (SRI) allowances with a revised computation model. Existing override allowances would be protected by the allowance developers. However, a new ship class allowance document would be tailored to the Material Maintenance Management (3M system) and demands received from Casualty Reports (CASREPS). The idea was to

ensure the ship would have material allowances that were needed based on demand but also reduce the amount of insurance items maintained as part of previously established allowance packages. During the ship's Integrated Logistics Overall (ILO), the excess spares would be offloaded and sent to the supply system to offset future procurements and to establish a consumer level of COSAL (insurance) spares ashore. [Ref. 15]

3. Some Type Commander Concerns and Facts

Some of the concerns raised by the Type Commanders and facts provided by an interview with the .5 FLSIP plus project officer in applying the .5 FLSIP plus COSAL include the following: [Ref. 16]

- Concern: The .5 FLSIP plus COSAL will reduce On Board Repair Parts (OBRP) by greater than 50%.

Fact: In the past, incremental COSAL changes applied between Integrated Logistics Overhauls (ILOs) only allowed additions to enter the SNAP database. Consequently, repair parts which should have been deleted from the allowance list were not entered until the ILO process. The new COSAL prepared during the .5 FLSIP plus COSAL model incorporates all configuration changes to the ship since the last ILO. Additionally, since there is a new COSAL, all deletions are processed and excesses are turned in to the CRAMSI ashore warehouse maintained by the Type Commander for redistribution. With the new .5 FLSIP plus COSAL, all items not deleted with previous COSAL changes are processed under the new COSAL, which gives the user the impression that over 50% of the allowed items are deleted with the new model.

- Concern: The .5 FLSIP plus model doesn't consider all maintenance related transactions and Casualty Report transactions within the model computation.

Fact: A major benefit of the .5 FLSIP plus model is that the computation considers all maintenance related demands forwarded to the Navy Inventory Control point through the maintenance reporting system (3M). Additionally, any items reported under the Casualty Reporting (CASREP) system by any of the ships within the ship's class are captured in the computation process and are considered for allowance.

- Concern: When some of these spares are transferred ashore, they are lost forever because the supply system no longer carries them in inventory.

Fact: Material turned in ashore is forwarded to the nearest CRAMSI site for potential redistribution to other fleet units not in excess of the part. Some material is later forwarded to the supply system (wholesale) as credits to the Operation and Maintenance, Navy (O&MN) operating budget. Those items not redistributed or turned in for credit remain in the CRAMSI system for one year. If no further demand is received fleet-wide, then the item will be disposed of in accordance with current directives.

- Concern: The .5 FLSIP plus program is just getting started. It will be quite a while before the benefits can be realized across all fleet units.

Fact: The Navy Inventory Control Point, Mechanicsburg, PA (NAVICP(M)) has automated the entire .5 FLSIP plus program and application processes. Under the guidance of the Type Commanders, more and more ships are having automated COSAL aids generated and forwarded to the ships for processing. Ships are no longer required to wait for Integrated Logistics Overhaul (ILO) prior to receiving a new or updated COSAL.

**4. An Analysis of the Success of .5 FLSIP Plus COSAL on
USS Peterson (DD-969) and USS San Jacinto (CG-56)**

In April 1994, USS Peterson (DD-969) received a .5 FLSIP Plus COSAL for processing. Numerous items which were previously allowed were deleted under the .5 FLSIP Plus computation process. However, because of the ship's scheduled deployment and a general concern that the material no longer allowed may be required during deployment, no excess material was offloaded and turned in ashore until after the ship returned from deployment. Table 4.1 represents a summary of the excess material offloaded from the ship after the ship's return from deployment. In particular, 790 Depot Level Repairables (DLRs) amounting to over \$4,952K dollars were turned in to the Type Commander CRAMSI site for further redistribution and/or credit to the Navy wholesale system. Additionally, 1,286 line items amounting to over \$793K dollars in consumable related repair parts were turned in to the CRAMSI site for redistribution and/or credit. [Ref. 17]

In October 1995, USS San Jacinto (CG-56) received a .5 FLSIP Plus COSAL for processing. Table 4.2 represents a summary of the excess material offloaded from the ship after application of the new COSAL. In particular, 1,346 DLRs amounting to over \$6,931K dollars were turned in to CRAMSI. Additionally, 2,717 items amounting to over \$4,813K dollars in consumable related repair parts were turned in to CRAMSI for redistribution. [Ref. 18]

USS PETERSON (DD-969) EXCESS MATERIAL OFFLOADED AS A RESULT OF PROCESSING .5 FLSIP Plus COSAL			
LINE ITEMS		TYPE OF MATERIAL	DOLLAR VALUE IN THOUSANDS
790		DLRs	\$4,952
1,286		NON-DLRs	\$793
TOTALS	2,076		\$5,745

Table 4.1 Summary of Excess Material Offloaded from USS PETERSON

USS SAN JACINTO (CG-56) EXCESS MATERIAL OFFLOADED AS A RESULT OF PROCESSING .5 FLSIP Plus COSAL			
LINE ITEMS		TYPE OF MATERIAL	DOLLAR VALUE IN THOUSANDS
1,346		DLRs	\$6,931
2,717		NON-DLRs	\$4,813
TOTALS	4,063		\$11,744

Table 4.2 Summary of Excess Material Offloaded from USS SAN JACINTO

In both cases, neither ship experienced any major requirements for items which had been turned in to CRAMSI as excess material. The prices shown for material turned in was the carrying price on the ship's data files and did not necessarily reflect the true dollar value of the material turned in to CRAMSI. However, with the introduction of this new .5 FLSIP plus COSAL model, a significant reduction in the amount of dollars and line items invested in inventories afloat can be realized. Additionally, a significant amount of material can be redistributed or turned in for credit, with increased O&MN savings.

D. FUNDING OF MATERIAL DEFICIENCIES PRIOR TO CONVERSION TO DBOF

1. Operations and Maintenance, Navy Funding of Stock Material Deficiencies

A major obstacle to the transfer of all afloat inventories to DBOF is the funding of any material deficiencies which exist and are not on hand or on order. As previously mentioned, the initial inventory allowance is funded through procurement dollars under Shipbuilding and Conversion, Navy (SCN) or Naval Sea Systems Command Technical Operating Budget (NAVSEA TOB) funds. Once the material is received in inventory, the O&MN funding is used to pay for the consumption and subsequent reorder for stock. The goal is to have 100% of all allowed material on hand or on order at time of conversion to DBOF. Therefore, one option is for the Type Commander to ensure that all allowed material is on hand or on order prior to conversion to DBOF. Steps could be taken in coordination with the Navy Inventory Control Point in Mechanicsburg, PA to validate allowances for material deficiencies prior to conversion, so that only those items identified as allowed items under the .5 FLSIP plus COSAL model would be procured for stock. Another potential option is that the DBOF fund would capitalize existing inventories at time of conversion, and any remaining material deficiencies identified as allowed items not on hand or on order could be funded from the expected windfall profit received from capitalization.

2. Would There be a Windfall Profit for DBOF as a Result of Capitalization?

There has been a lot of discussion about whether there would be a windfall profit for DBOF as a result of capitalization. In some of the discussions with the Type Commanders, the argument is that there wouldn't be a windfall profit but there would be some cost avoidance. The cost avoidance would be for those deficiencies funded by O&MN which had not been received at time of conversion, since DBOF money would not be required to buy the incoming stock requisitions.

Once stock material was received from previously funded O&MN requisitions, the material would be capitalized into DBOF and reported as an inventory asset. That may be true for allowed material deficiencies that were ordered for stock prior to conversion. However, what about material that was excess on order or excess on hand at time of conversion?

The March 96 Force Inventory Management Analysis Reporting System (FIMARS) report for COMNAVSURFLANT discussed in Chapter III reflected over \$29 million dollars in excess on order and \$111 million in excess on hand. Although the pricing data would require validation, these figures indicate that there may be a potential windfall profit to DBOF. That windfall profit would be realized from the future sale of any items in inventory that were excess and which DBOF did not previously buy. In addition, material which was excess on order at time of conversion that was funded by a procurement account or O&MN would become part of the DBOF inventory upon receipt and capitalization. If that material was capitalized at time of receipt and resold as a future sale, then DBOF would receive the benefit of the sale without the initial cash outlay. Therefore, in that context, there would be a windfall profit to DBOF if the material was excess to allowance.

Additional savings for DBOF will result when transferring excess material to the wholesale supply system to satisfy outstanding stock replenishment requirements at only the cost of transportation. This could result in a substantial savings to DBOF, particularly for material being procured from outside the Navy, including the Defense Logistics Agency (DLA), Government Services Administration (GSA) and commercial vendors. Capitalization of all inventories would result in afloat and wholesale ashore inventories being absorbed into one large revolving fund for potential redistribution as Other Supply Officer (OSO) transfers with costs charged to O&MN only for material used for end-use. O&MN would no longer be responsible for funding of stock replenishment. It would only pay for those items which were ordered and used by the customers. Initial outfitting requirements could continue to be funded by procurement accounts.

E. ESTABLISHMENT OF AN AVIATION COORDINATED ALLOWANCE LIST (AVCAL) FOR THE LIGHT AIRBORNE MULTI-PURPOSE SYSTEM (LAMPS) HELICOPTER PACK-UP KIT (PUK)

LAMPS helicopters have become a major weapon system used in support of a ship's assigned mission. Previously, when a LAMPS detachment was embarking for deployment, the parent air station where the helicopter was attached would create a Pack-Up kit (PUK) to be used for supply support for the helicopter while the ship was deployed.

The LAMPS PUK came with a load list of recommended spare parts or allowed PUK items, including repairables and consumables for aviation support. The Supply Officer would receive an automated listing from the parent air station with manual stock record cards. These manual stock record cards were used for inventory management while the ship was deployed and the PUK was onboard under the custody of the Supply Officer.

In 1992, an automated PUK management system was developed by COMNAVSURFLANT and the USS BRISCOE (DD-977), called the Aviation Inventory Management System (AIMS). This program was used for managing the Pack-Up kit in a PC based environment. This stand-alone computer system allowed for the automation of various factors involved in maintaining the aviation Pack-Up Kit during deployments and allowed for the discarding of manual listings and stock record cards. In most recent years, the PUK has remained with the ships after deployments as part of the ship's inventory in the event a LAMPS detachment returned for deployment. Although the official inventory remained on the parent air station's records, the PUK remained aboard the ship under the custody of the Supply Officer. Currently, there is a major move by the LAMPS helicopter parent air stations to decapitalize the PUK inventory from the air stations and expend them to end-use to allow the Supply Officer afloat to have total responsibility and ownership of this level of inventory.

At the most recent Fleet Supply Policy Council (April 96) in San Diego, CA, the Fleet Commander, Type Commanders, Navy Inventory Control Point, Philadelphia, PA and Naval Air Systems Command (NAVAIRSYSCOM) agreed to study the possibility of establishing an Aviation Coordinated Allowance List (AVCAL) for LAMPS PUK related material. With the planned release of Relational Supply (R-Supply), the discussion centered around the possibility of capitalizing all PUK material into DBOF as an AVCAL. This would allow all the previous benefits noted about DBOF related inventories and would allow the full ownership and responsibility to pass from the parent air station to the afloat Supply Officer responsible for supply support when LAMPS helicopters are embarked.

Although this concept is currently being studied and reviewed for later discussion and decision, it is another example of how inventory management afloat could be streamlined and standardized by capitalization of assets into DBOF.

V. STOCK-IN-TRANSIT AND MATERIAL-IN-TRANSIT MANAGEMENT

A. GENERAL

This chapter examines the potential management of unmatched receipts and expenditures for Defense Business Operating Fund (DBOF) activities operating under the Material Financial Control System (MFCS) discussed in Chapter III. First, a review will be provided of the current processing of unmatched receipts and expenditures for DBOF activities operating under Special Accounting Class (SAC) 207. This review will include a current summary of the number of unmatched receipts and expenditures for all Type Commanders within each Fleet Commander as of April 1996. In the final part of this section, an overview will be provided of the plans to have all afloat DBOF activities become Centralized Accounting and Billing (CAB) activities under the MFCS Retail inventory management system.

Second, an overview will be provided of the accounting for unmatched receipts and expenditures for Centralized Accounting and Billing (CAB) activities. This overview will include a description of the planned process which will be used for afloat activities in reviewing and reconciling all unmatched transactions. Additionally, a review will be provided of Stock-In-Transit (SIT), Material-In-Transit (MIT) and Accounts Payable related transactions for DBOF activities under MFCS-Retail. This analysis will include a need for automated financial reconciliation of unmatched transactions through the use of the Report Of Discrepancy (ROD) procedures for all unmatched transactions using a SIT/MIT net for automated tracking, controlling and resolving of unmatched SIT/MIT and Accounts Payable related issues and receipts. Finally, an overview will be provided of the requirements necessary for reconciliation of previous unmatched receipts and expenditures prior to conversion of existing SAC-207 activities to MFCS-Retail.

B. CURRENT PROCESSING OF UNMATCHED RECEIPTS AND EXPENDITURES FOR DBOF ACTIVITIES

1. Current Processing of Unmatched Receipts

As pointed out in Chapter II, Figure 2.2, an unmatched receipt results when a DBOF activity reports a receipt of an item for which there is no matching expenditure document processed during the financial reconciliation of DBOF transactions. If a receipt does not match or only partially matches an expenditure, the unmatched portion of the receipt will be reflected on the Unmatched Receipt Report (A&G listing). Caption 'A' related transactions represent unmatched receipts from Navy activities. Caption 'G' activities represent receipts from non-Navy activities. Table 5.1 provides a current summary of unmatched receipts (A&G) for each Type Commander and Fleet Commander for the month of April 1996, including the dollar value of unmatched receipts and document counts. As illustrated in Table 5.1, the total dollar value of unmatched receipts, (A&G) is \$1,203,026,000 with 357,437 documents listed as totally or partially unmatched.

2. Current Processing of Unmatched Expenditures

As pointed out in Chapter II, an unmatched expenditure for a DBOF activity results when a supply activity forwards expenditure data in the form of abstracts, summaries and billings to the appropriate OPLOC and there is no matching receipt reported by the DBOF activity. If an expenditure does not match or only partially matches an incoming receipt, the unmatched portion of the expenditure will be reflected on the Unmatched Expenditure Report (C&H listing). Unmatched Caption 'C' expenditures are from Navy DBOF activities. Caption 'H' expenditures are from non-Navy activities. Table 5.2 provides a current summary of unmatched expenditures (C&H) for each Type Commander and Fleet Commander for the month of April 1996, including the dollar value of totally or partially unmatched expenditures and document counts. As illustrated in Table 5.2, the total dollar value of unmatched expenditures (C&H) is \$373,212,000 with 166,044 documents listed as totally or partially unmatched expenditures.

CUMULATIVE UNMATCHED RECEIPTS FOR APRIL 1996 (DOLLARS (\$) IN THOUSANDS)		
ACTIVITY	DOLLAR VALUE UNMATCHED	RECORD COUNT
COMMANDER NAVAL SURFACE FORCES ATLANTIC FLEET (CNSL)	\$ 40,610	20,367
COMMANDER SUBMARINE FORCES ATLANTIC FLEET (CSL)	\$ 8,159	16,701
COMMANDER NAVAL AIR FORCES ATLANTIC FLEET (CNAL)	\$ 126,365	46,218
FLEET MARINE FORCES ATLANTIC FLEET (FMFLANT)	\$ 113,544	36,603
TOTAL COMMANDER-IN-CHIEF ATLANTIC FLEET (CINCLANTFLT)	\$ 288,678	119,889
COMMANDER NAVAL SURFACE FORCES PACIFIC FLEET (CNSP)	\$ 74,629	47,193
COMMANDER SUBMARINE FORCES PACIFIC FLEET (CSP)	\$ 36,932	30,334
COMMANDER NAVAL AIR FORCES PACIFIC FLEET (CNAP)	\$ 331,799	77,608
FLEET MARINE FORCES PACIFIC FLEET (FMFPAC)	\$ 470,988	82,413
TOTAL COMMANDER-IN-CHIEF PACIFIC FLEET (CINCPACFLT)	\$ 914,348	237,548
GRAND TOTAL OF CUMULATIVE UNMATCHED RECEIPTS FOR DBOF ACTIVITIES	\$ 1,203,026	357,437

Table 5.1 Cumulative Summary of Unmatched Receipts (A&G)
For the Month of April 1996

CUMULATIVE UNMATCHED EXPENDITURES FOR APRIL 1996 (DOLLARS (\$) IN THOUSANDS)		
ACTIVITY	DOLLAR VALUE UNMATCHED	RECORD COUNT
COMMANDER NAVAL SURFACE FORCES ATLANTIC FLEET (CNSL)	\$ 20,659	15,509
COMMANDER SUBMARINE FORCES ATLANTIC FLEET (CSL)	\$ 10,928	14,040
COMMANDER NAVAL AIR FORCES ATLANTIC FLEET (CNAL)	\$ 54,700	29,654
FLEET MARINE FORCES ATLANTIC FLEET (FMFLANT)	\$ 37,356	16,839
TOTAL COMMANDER-IN-CHIEF ATLANTIC FLEET (CINCLANTFLT)	\$ 123,643	76,042
COMMANDER NAVAL SURFACE FORCES PACIFIC FLEET (CNSP)	\$ 18,655	19,792
COMMANDER SUBMARINE FORCES PACIFIC FLEET (CSP)	\$ 8,292	15,624
COMMANDER NAVAL AIR FORCES PACIFIC FLEET (CNAP)	\$ 94,545	35,122
FLEET MARINE FORCES PACIFIC FLEET (FMFPAC)	\$ 128,077	19,464
TOTAL COMMANDER-IN-CHIEF PACIFIC FLEET (CINCPACFLT)	\$ 249,569	90,002
GRAND TOTAL OF CUMULATIVE UNMATCHED RECEIPTS FOR DBOF ACTIVITIES	\$ 373,212	166,044

**Table 5.2 Cumulative Summary of Unmatched Expenditures (C&H)
For the Month of April 1996**

3. DBOF Activities as Centralized Accounting and Billing (CAB) Activities Under MFCS Retail

As pointed out in Chapter III, the current plan calls for creation of a single stores accounting system for afloat inventory and financial management, referred to as the Material Financial Control System-Retail (MFCS-Retail). Under MFCS-Retail, all DBOF activities would become Centralized Accounting and Billing (CAB) activities. Through this concept, a previous DBOF activity would become a Transaction Item Reporting (TIR) activity under the centralized inventory management of the Navy Inventory Control Point (NAVICP). Under the TIR process, all receipts, issues and other related adjustments would be transmitted to the centralized processing activity at NAVICP for MFCS-Retail related transactions. Afloat DBOF activities would become floating warehouses, while detailed inventory and financial management would be conducted ashore at the Navy Inventory Control Point (NAVICP) in a master database.

All unmatched expenditures, including Stock-In-Transit (SIT) and Material-In-Transit (MIT), would be reviewed and reconciled ashore using automated media for causal research and reconciliation. In addition, receipts from non-Navy sources with no matching expenditures, reported by CAB activities, would be placed in an Accounts Payable file under MFCS-Retail, awaiting a match against an expenditure. Automated reconciliation would be conducted for all unmatched transactions using the benefits realized from the Receipt of Discrepancy (ROD), Standard Form 364 (SF-364), procedures. An automated ROD will be used to support requests for receipt, billing and inventory or financial adjustment to appropriate records when required. In the case of unmatched expenditures, an automated ROD will be sent to the billing activity after a certain time frame with a request for Proof Of Shipment (POS). Automated RODs will also be used to assist in validating unmatched receipts. More information on Stock-In-Transit (SIT), Material-In-Transit (MIT) and Accounts Payable transaction reconciliation will be provided in the next section.

**C. ACCOUNTING FOR UNMATCHED EXPENDITURES AND RECEIPTS
FOR CENTRALIZED ACCOUNTING AND BILLING (CAB) ACTIVITIES**

1. Stock-In-Transit (SIT)

Stock-In-Transit (SIT) is Navy supply system material in transit between two Navy Centralized Accounting and Billing (CAB) activities. Commercial contractors are also considered CAB activities if they are managed under SIT. SIT includes stock redistributions, (formerly known as Other Supply Officer (OSO) receipts and summaries for DBOF activities), stock referrals, retrograde transshipments and returns from commercial or other service repair facilities. [Ref. 19, p. 5-1]

Under SIT, the material in transit represents those transactions in which an issue has been processed by one SIT activity but no receipt has been reported by the receiving activity. Additionally, SIT also represents those transactions in which a receipt has been processed by a CAB activity but no issue from another has been processed. To relate current SIT to afloat DBOF activities, SIT expenditure transactions would represent those transactions which were Caption 'C' related transactions if they were from CAB activities. SIT receipt transactions would represent those receipts where were Caption 'A' related transactions if they were from CAB activities.

a. *SIT RODs and SITNET*

SIT RODs are automated documents used by the Navy Inventory Control Point (NAVICP) to track, control and resolve unmatched SIT issue and receipt transactions. SITNET is an automated system that tracks, controls and resolves unmatched SIT transactions. It is a screen driven, on-line transaction processing system used for management of unmatched SIT transactions for CAB activities. [Ref. 19, p. 5-1]

b. Receipt Tracking Index (RTI)

The Receipt Tracking Index (RTI) is an automated system maintained by NAVICP for tracking of unmatched issue and receipt transactions from CAB activities. When a matching Transaction Item Report (TIR) is received (i.e., a receipt TIR that matches an issue or an issue is received for a previous receipt TIR), the record in the RTI is automatically closed. The RTI serves as a suspense file of unmatched SIT related transactions awaiting reconciliation until the transaction is properly matched.

c. The PM76 Program

PM76 is an automated tracking program used for tracking of unmatched Stock-In-Transit (SIT) records. It automates the search of internal NAVICP files and those of external reporting CAB activities. It will send follow-ups and process follow-up replies, create adjustment transactions and recommend transactions for write-off when reconciliation can not be completed through normal SIT ROD processing. When an automatic match of an expenditure and receipt for a SIT related transaction does not occur, the PM76 program will create a NAVICP intransit request or ROD for Proof Of Shipment (POS) in the case of unmatched SIT related expenditures and an automated ROD for Proof Of Delivery (POD) in the case of unmatched receipts. Time frames for generation of automated RODs for Proof Of Shipment (POS) and Proof Of Delivery (POD) are outlined in NAVSUP instruction 4440.179A. [Ref. 19]

2. Material-In-Transit (MIT)

Material-In-Transit (MIT) is non-Navy supply system material in transit between a non CAB activity and a CAB activity. Typically, MIT related transactions will be for unmatched expenditures received from Defense Logistics Agencies (DLA), General Services Administration (GSA) and commercial activities. MIT transactions represent an expenditure with no matching receipt from the CAB reporting activity. This file would be similar to today's unmatched expenditure file for non-Navy transactions for afloat DBOF activities, called the Caption 'H' listing.

Currently, the NAVICP PM76 program does not track MIT related transactions by automated means. However, steps have been taken to request programming support to modify existing SITNET, RTI and automated ROD processing procedures to allow for an on-line capability to follow up on unmatched MIT related transactions. A requirements statement has been drafted by the Inventory Accuracy Branch at Navy Inventory Control Point, Mechanicsburg, PA and submitted to the programmers at the Fleet Material Support Office (FMSO) Mechanicsburg, PA, requesting assistance in creating a MIT process which could process non-Navy related transactions similar to SIT.

3. Accounts Payable For Unmatched Receipts Under MIT

A current proposal under consideration by the Inventory Accuracy Branch at NAVICP is to establish an automated Accounts Payable file as part of the Standard General Ledger (SGL). This Accounts Payable file would be used to maintain all unmatched receipts received from non-Navy activities as Material-In-Transit awaiting receipt of an expenditure. This file would be similar to today's unmatched receipt file for afloat DBOF activities, called the Caption 'G' listing.

Detailed receipts from MIT activities would be reported as Transaction Item Report (TIR) receipts by the afloat unit to NAVICP. Unmatched MIT receipts would remain in an Accounts Payable status until an incoming expenditure was processed to match against the receipt. Follow-up actions for receipts which are not matched against subsequent expenditures are currently under discussion. [Ref. 20]

D. RECONCILIATION OF UNMATCHED RECEIPTS AND EXPENDITURES PRIOR TO CONVERSION TO MFCS-RETAIL

1. Unmatched Receipts (A&G Listing)

As pointed out earlier in this Chapter, there are currently 357,437 documents with a dollar value of \$1,203,026 listed as outstanding unmatched receipts for DBOF activities. The current decision that has been made is that those transactions which have been unmatched for less than 90 days will automatically be transferred to their respective unmatched receipt file. Caption 'A' transactions for material less than 90 days unmatched will transfer to the SIT file and Caption 'G' related transactions for material less than 90 days unmatched will transfer to the Accounts Payable file held at NAVICP until reconciled. Those unmatched receipts listed on the Caption A&G listing for greater than 90 days are to be reconciled by the Type Commander and/or OPLOC and will not be transferred to the MFCS-Retail system for review and processing. This is not an easy task, as some of the unmatched receipts have been listed on the unmatched receipt report for more than a year without reconciliation.

In addition to a receipt being a Caption 'A' (receipt from Navy) and Caption 'G' (receipt from non-Navy), there are two types of receipts which are listed on the A&G listing. The two types of unmatched receipts are stock and Direct Turn-Over (DTO). Each Type Commander currently has assigned staff personnel as well as contractor support which could be used to help reconcile unmatched receipts older than 90 days prior to conversion to MFCS-Retail. However, some steps will be required in reconciling any unmatched receipt. The following steps apply:

- First, unmatched receipts must be compared to unmatched expenditures to determine if there is a potential near match condition. In some cases, receipts listed as unmatched on the A&G listing can be matched against expenditures listed as unmatched on the C&H listing but the document numbers may not be the same.

- Next, each receipt must be validated by the afloat activity to determine if the receipt was a valid receipt from the source indicated on the unmatched listing. Many times, receipts listed as unmatched were improperly processed as valid receipts when the material was not received. A good example of this type of receipt is the receipt of requisitions with overaged shipping status. Requisitions with overaged shipping status may have been processed as received at the shipboard level and closed out, although the material was never actually received. This is usually done to clear requisitions from the outstanding file so that the material can be reordered if required. Those receipts which are truly valid should have requests sent to the proper billing or summary activity requesting an expenditure.
- Receipts for stock or storeroom inventory found to be invalid at the shipboard level should be reversed and an appropriate inventory action should be taken as required. This action may include causal research to reconcile the current on hand quantity with the automated stock record on hand quantity maintained in the database after the receipt reversal is processed.
- Those receipts found to be invalid at the shipboard level for DTO should be reversed. This would allow proper credit to the Type Commander OPTAR holder, because they were previously charged for an item as a result of processing an invalid receipt.
- At some point, those remaining stock transactions which are not reconciled should be adjusted to the stock fund with a receipt reversal transaction followed by an inventory adjustment if required to remove erroneous overaged receipts from the A&G listing prior to conversion to MFCS-Retail.

2. Unmatched Expenditures (C&H Listing)

As pointed out earlier in this Chapter, there are currently 166,044 documents with a dollar value of \$373,212,000 listed as outstanding unmatched expenditures for DBOF activities. The current decision that has been made is that those transactions which have been unmatched for less than 90 days will automatically be transferred to their respective unmatched expenditure file. Caption 'C' transactions for material less than 90 days unmatched will transfer to the SIT file and Caption 'H' related transactions for material less than 90 days unmatched will transfer to the Material-In-Transit (MIT) file held at NAVICP until reconciled. Those unmatched expenditures listed on the Caption C&H listing for longer than 90 days are to be reconciled by the Type Commander and/or OPLOC and will not be converted to the MFCS-Retail system for review and processing.

In addition to an expenditure being a Caption 'C' (expenditure from Navy) and Caption 'H' (expenditure from non-Navy), there are two types of expenditures which are listed on the C&H listing. The two types of unmatched expenditures are stock and Direct Turn-Over (DTO). Each Type Commander currently has assigned staff personnel as well as contractor support which could be used to help reconcile unmatched expenditures older than 90 days unmatched prior to conversion to MFCS-Retail. However, some steps will be required in reconciling any unmatched expenditures. The following steps apply:

- First unmatched expenditures must be compared to unmatched receipts to determine if there is a potential near match condition. In some cases, expenditures listed as unmatched on the C&H listing can be matched against receipts listed as unmatched on the A&G listing but the document numbers may not be the same.

- All unmatched expenditures listed in the C&H listing must be reviewed against the hard copy receipt file to determine if a valid receipt was received onboard the ship but was accidentally filed prior to processing. These transactions should be properly processed as valid receipts.
- Next, each expenditure must be compared against the ship's requisition file to determine if a valid outstanding requisition exists but was not received. If a requisition is on file as outstanding for the unmatched expenditure, the receipt should be processed if the expenditure is overaged and can not be challenged for Proof Of Shipment. Stock transactions will require inventory action to validate the current on hand quantity with the stock record database.
- Those expenditures which appear to be invalid should be appropriately challenged through the Receipt Of Discrepancy (ROD) or NAVCOMPT168 (Request for Proof of Shipment, Navy) if the challenge is within the required time frames outlined in the ROD manual.
- Careful review of all DTO transactions not listed in the requisition file as outstanding will be required prior to processing receipts for unmatched DTO expenditures. Any expenditures which are processed for DTO transactions not listed in the requisition file will impact OPTAR dollars.
- At some point, those remaining stock transactions which are not reconciled should be adjusted to the stock fund with a receipt transaction followed by a proper inventory adjustment to remove erroneous overaged expenditures from the C&H listing prior to conversion to MFCS-Retail.

3. Automated Reconciliation of Unmatched Receipts and Expenditures (PC UNMEX)

Various automated tools are available for conducting research and reconciliation of unmatched transactions against the shipboard database. In particular, one major tool which has been under development for over a year by the Navy Material Assistance Support Systems Office (NAVMASSO), Chesapeake, VA is PC UNMEX.

PC UNMEX was designed to allow an input file of unmatched receipts and expenditures to be reviewed against the appropriate DBOF mainframe database files for extracting of requisition information on unmatched transactions. This input file screens the current requisition file, Requisition History File (RHF), Cumulative Receipt History (CRH) file, OPTAR History File (OHF) and other related mainframe database files for any information which may be helpful for reconciling unmatched transactions. The extracted data is then combined with the unmatched data from the OPLOC and loaded to a PC for review by the financial technician.

Through the use of the PC, the financial technician can select various categories of unmatched transactions to allow for a greater ease of processing and reconciling them. Detailed receipts and other related supply transactions can be generated on the PC and fed to the mainframe supply management system via a batch process. The overall objective would be to use whatever automated tools are available to assist in reconciling unmatched transactions. PC UNMEX could be forwarded from NAVMASSO as a utility program to assist the ships in reconciliation of all unmatched receipts and expenditures prior to conversion to MFCS-Retail.

VI. STREAMLINING DETAILED OBLIGATIONAL REPORTING

A. GENERAL

This chapter reviews the current detailed obligational reporting procedures used by the fleet for reporting of financial transactions under general funds management or Operating Target (OPTAR) accounting. In addition, an overview will be provided of the Standard Accounting and Reporting System, Field Level (STARS-FL) system. Emphasis will be placed on how the conversion to STARS-FL could help in establishing a framework for removing financial accounting afloat to an ashore accounting center. In addition, discussion will include what areas could be streamlined and automated to help in providing increased accuracy and timeliness in reporting financial data while reducing workload afloat.

First there will be a review of the current financial reporting process for detailed obligations to the Defense Finance and Accounting Service Operating Locations (DFAS OPLOCs) as outlined in Chapter II. Second, an overview will be provided of the STARS-FL system for general funds accounting. This examination will include an analysis on the reasons for converting to the STARS-FL system for fleet accounting. In addition, this section will include an overview of the conversion steps being reviewed for converting from the Fleet Resource Accounting Module (FRAM), including the technical approach, design and STARS-FL impact on the users. Third, a review will be made of the STARS-FL functionality in dealing with transaction processing, reports and inquiry processing. This section will also include fleet issues raised by the Fleet and Type Commanders prior to STARS-FL conversion. Finally, an analysis will be provided on what steps could be taken to streamline current detailed obligational reporting under general funds management to help eliminate the need for biweekly financial transmittals and monthly Budget Operating Target (OPTAR) reporting.

B. CURRENT FINANCIAL REPORTING

1. Detailed Obligations and Cancellations

As pointed out in Chapter II, Operating Targets (OPTARs) are provided to a ship as an allocation of Operation and Maintenance, Navy (O&MN) funds for use in procuring goods and services for the ship's use. Each time a requisition is submitted, an obligation is recorded in the ship's computer Financial Holding File (FHF) for subsequent transmission to the DFAS OPLOC. Additionally, any requisitions which are canceled between financial reporting periods are also recorded to the ship's FHF. Biweekly, the FHF data is forwarded to the DFAS OPLOC in the form of a financial transmittal (TL). The transmittal will include all detailed obligations and cancellations, including summary data for each expense element or fund code. The summary information on the transmittal will be used by the DFAS OPLOC in balancing the detailed transactions provided under the transmittal. Transmittals are currently forwarded on the 15th and last days of the month.

2. End of Month Budget OPTAR Report (BOR)

As pointed out in Chapter II, the Budget OPTAR Report (BOR) is submitted monthly to the DFAS OPLOC and the Type Commander. The BOR serves as a summary report of all financial transactions recorded for the entire month by expense element or fund code. More importantly, it allows the Type Commander to determine the amount and rate of execution of the budgeted dollars allocated to the ship for OPTAR use. The cumulative values of all obligations and cancellations reported on the biweekly transmittals will be summarized on the BOR. Additionally, the Type Commander will use the BOR as a tool to have ships report other financial related data, including charter and hire costs, amount of Material Obligation Validations (MOVs) conducted during the month and amount of cancellation requests sent during the month in an effort to recapture funds for material no longer required.

**C. STANDARD ACCOUNTING AND REPORTING SYSTEM, FIELD LEVEL
(STARS-FL)**

1. STARS-FL Overview

STARS-FL is a financial accounting system maintained by the Defense Finance and Accounting Service Operating Locations (DFAS OPLOCs) to provide a means of tracking allocated funds from the time they are authorized through the life cycle of an appropriation at the field level. The system is designed to account for the obligation, cancellation, expenditure and disbursement of all Operating Target (OPTAR) funds provided to various cost centers throughout the Navy.

Primarily, STARS-FL provides accounting for the administration of the Operation and Maintenance, Navy (O&MN); Research, Development, Test and Evaluation (RDT&E) and other types of allotment accounting. STARS-FL is designed to provide the Financial Information Processing Center (FIPC) and Fund Administrator Activity (FAA) with "real-time" financial information. This "real-time" information is provided in the form of the Trial Balance (NAVCOMPT Form 2199) and Status of Funds Authorization (NAVCOMPT Form 2025). Changes to the STARS-FL system are reflected daily and reported to the STARS-FL Headquarters in Washington, D.C. [Ref. 21]

STARS-FL provides an opportunity to consolidate various accounting systems used for Fleet and Ashore accounting into one standardized system. With the impact of the Chief Financial Officer Act and other initiatives designed to allow for "real-time" financial data, STARS-FL is seen as the tool for providing more accurate and timely financial reporting. With the STARS-FL capability of providing interactive financial query for the Funds Administrators and Type Commanders, financial information will be provided at the users finger tips for budget preparation, execution and management.

2. Conversion of the afloat financial reporting to STARS-FL

a. Background

The Fleet Resource Accounting Module (FRAM) is a field level accounting system that currently supports three major commands including Commander-in-Chief Atlantic Fleet (CINCLANTFLT), Commander-in-Chief Pacific Fleet (CINCPACFLT) and Commander Special Warfare Command (COMSPECWARCOM). The FRAM system runs on the UNISYS (UNIVAC 1100) mainframe computer. One mainframe computer is located at each DFAS OPLOC, in Norfolk, Virginia for east coast activities and in San Diego, California for west coast activities. Financial reporting by customers is done on a bi-weekly basis and reconciliation of obligations to incoming expenditures is done monthly.

As a result of FRAM's age (over 25 years old) and limited capability, DFAS Cleveland and the Navy determined that the system needed to be modernized and standardized. FRAM is an old accounting system which processes solely in a batch mode. The original project strategy was to convert FRAM to run on an IBM and then fully upgrade it to a modern, D-Base 2 system with real-time transaction processing and reporting capabilities. [Ref. 22]

b. Conversion from FRAM to STARS-FL for Ashore Accounting

Conversion of the FRAM programs from the UNIVAC mainframe to the IBM environment began in February 1994 and continued through June 1994. The initial plan was for all ashore accounting activities to convert from FRAM to STARS-FL prior to any afloat fleet conversion. During this phase, over 100 programs had to be converted from UNIVAC COBOL to IBM COBOL II. Programming efforts were managed by the Navy's Fleet Material Support Office (FMSO) as the Central Design Agency (CDA) for ashore non-tactical automated data processing. Unit testing was performed on a limited number of programs, with on-site support from OPLOCs Norfolk and San Diego.

Parallel testing of the daily processing began in July 1995 at both OPLOCs with FMSO staff on-site for the initial two weeks of the implementation. Daily communications were maintained with both sites throughout the implementation process. Some obstacles were encountered with the parallel testing, as STARS-FL did not always report the same data the FRAM system reflected. However, these differences were soon resolved and the OPLOCs started converting all ashore accounting activities from the FRAM system to STARS-FL.

c. Conversion from FRAM to STARS-FL for Afloat Accounting

The transition of afloat accounting for Operating Forces (OPFORCES) to STARS-FL environment is being accomplished incrementally. The first group to move was the Special Warfare (SPECWAR) fund administrators. They began utilizing STARS-FL batch processing in October 95. The last phase of the transition process will bring the rest of the fleet into the STARS-FL environment. Tentatively, the target date for Operating Force conversion from the FRAM system to STARS-FL is 1 October 97.

d. Technical Approach

Two factors were critical in driving the selection of the technical solutions for transitioning the Operating Forces (OPFORCES) to the STARS-FL environment. The first requirement was that the OPFORCES would experience little to no change in their current business practices. The bottom line would be that the afloat community would still forward transmittals and Budget OPTAR reports as usual. The second factor was the decision that every effort would be made to minimize change to existing STARS-FL core processes. Fleet Accounting by the OPFORCES included requirements not currently met in STARS-FL. It was necessary to design a solution to satisfy those requirements outside of normal STARS-FL processing boundaries. The design selected included a combination of client/server and mainframe modules which front-end STARS-FL and provide daily processing support.

e. Design

The client/server application will support the collection, validation and submission of obligational data currently received via the ship's transmittals. Data and processing will be distributed over the two-tiered architecture, with desktop supporting data entry, extraction and validation processing and the server supporting data storage, administration and submission for upload processing. This application is currently being tested using the Powerbuilder development tool. The end product will be a WINDOWS application.

The mainframe portion of the design contains three STARS-FL front-end modules. The transmittal (TL) module will process the records received from the client/server application. It will balance detail records to summary records, suspend suspected duplicate transmittals and accumulate Fiscal Year-To-Date (FYTD) obligation totals by Fund Code. In addition, there is a back-up module that is designed to create fleet-unique reports. These include the Cost Category Status Report, which tracks costs by ship and expense element or fund code; the Budget caption report, which provides summary data on execution of the O&MN budgeted dollars; and the Summary Filled Order/Expenditure Detail Report, which reflects those transactions matching a previously established obligation with a recorded expenditure or those transactions which reflect a difference between amount obligated and amount expended. [Ref. 23]

f. STARS-FL impact on users

Throughout this level of effort, the impact on users is expected to be positive. At the OPTAR holder level, there will possibly be some minor report format changes to support Fleet requirements. STARS-FL will be updated "real-time" with the receipt of transmittal data or expenditures. At both the Type Commander and OPLOC levels, users will have the on-line capability to enter direct authorizations, establish job orders and create and review various reports and financial data. In addition, most of the PC related programs currently in use by the OPLOCs will be upgraded and made compatible with STARS-FL.

D. STARS-FL FUNCTIONAL REVIEW

1. Job Order Processing

Under STARS-FL, the system will create job order numbers by ship and expense element or fund code for a fiscal year. Throughout the entire year and subsequent accounting period, STARS-FL will use the job order to record cumulative obligations and costs. The job order data will be used by the FAA and Type Commanders in collecting costs for future budget preparations.

2. Transaction Processing

Under STARS-FL the user will be able to enter or correct any accounting transaction. Through a combination of batch processing and interactive on-line posting, transactions will be validated by STARS-FL and subsequently posted to the live data files. These detailed transactions will update the document, job order and general ledger account tables maintained on-line by STARS-FL.

3. Reports/Inquiry Processing

Under STARS-FL, the system provides official and subsidiary accounting reports. The following major reports are provided: [Ref. 21]

- NAVCOMPT 2199 lists all General Ledger accounts under a line of accounting (LOA) for each account balance greater than zero. The previous month's balance, the current month's balance and the change amount will be displayed. Sub totals will be accumulated for assets, liabilities, investments, income, expense and memorandum account groups. A grand total will be computed for all these groups.
- NAVCOMPT 2171 lists the expenses and the gross adjusted obligations for the current month by expense element or fund code and activity.
- NAVCOMPT 2025 lists the authorizations or allotments received for the year to date, current changes and year-to-date amounts for obligations, disbursements and uncommitted balances. The NAVCOMPT 2025 data will be displayed by budget project for each

fiscal year, appropriation symbol subhead, allotment number and sub-allotment number for the entire appropriation.

- NAVCOMPT 2030 provides the user detailed ledger account access. This data will be broken down into major execution codes as follows:

100 - Authorizations received

300 - Uncommitted balances

400 - Commitments

500 - Obligations

600 - Expenditures

4. Fleet Issues Prior to STARS-FL Conversion

With the planned conversion of the fleet to STARS-FL, the Type Commander and Fleet Commanders decided to hold a financial working group forum to discuss issues which could impact the conversion of the fleet to STARS-FL. These issues were resolved by the working group, which included members from the Assistant Secretary of the Navy for Financial Management and Comptrollership (ASN (FM&C)) and the Fleet Material Support Office(FMSO). [Ref. 24]

a. Threshold Concept

Under the FRAM system, all transactions where the difference between the obligation and expenditure was \$100 or less would be reflected in a summarized amount by fund code on the Summary Filled Order Expenditure Difference Listing (SFOEDL) sent back to the ship for processing. Under STARS-FL, the fleet requested that the threshold be raised to a difference of \$250 or less so that the number of transactions forwarded to the ship for review was reduced. The \$250 dollar threshold was also used by the Navy as the minimal amount authorized for challenging of any expenditures recorded against previous obligations by the fleet.

Additionally, the fleet requested that any expenditure which exceeded an obligation be placed in a suspense file at the OPLOC for a period of 60 days. This would allow the OPTAR holder to provide an obligation adjustment prior to further processing. If the transaction was not reconciled within 60 days, then STARS-FL would forward the difference to the fleet for posting/processing. Next, the fleet requested that transactions greater than \$3,000 be placed in the same suspense file for review at the OPLOC and Type Commander level. Those transactions having a difference greater than \$3,000 would only be forwarded to the fleet for action after a period of 60 days and after OPLOC/Type Commander review. The goal was to reduce the workload afloat and to ensure that the expenditure record was a correct transaction.

b. Money Value Only Adjustments

Under the old system, the Defense Business Operations Fund activities provided summary data on obligations by fund code or money value only transactions on a monthly basis with the submission of Special Accounting Class (SAC) 207 financial returns. For example, if there were 200 obligations for a fund code, only one money value only transaction for the total obligated amount of the 200 requisitions would be submitted to OPLOC for processing. However, STARS-FL required detailed transactions for general funds management and would not allow summary transactions. Prior to conversion of SAC 207 activities, the afloat software program for managing the financial reporting, Shipboard Uniform Automated Data Processing System (SUADPS), would be changed to allow for detailed obligational reporting vice summary reporting by fund code. There are currently 41 SUADPS activities including carriers (CVN, CV), tenders (AS, AD), supply replenishment ships (AFS, T-AFS), Marine Aviation Logistic Squadrons (MALS), and amphibious landing/assault platforms (LPH, LHD, LHA). Additionally, at time of conversion, detailed obligational data for remaining customer obligations would be provided for prior years to allow STARS-FL to incorporate prior year detailed outstanding obligations awaiting receipt.

**c. Advance Material Credits for Material Turned-in-ashore
(MTIS) and Financial Inventory Report (FIR) Code
"JC" Credits**

For MTIS credits and other credit expenditures, STARS-FL could not process the credit unless there was a preceding obligation for the transaction. However, on many occasions, the fleet turned in material for credit without a previous known obligation or requisition. The STARS-FL programmers agreed to allow for credit expenditures without any previous obligation.

Another concern raised by the fleet dealt with the DBOF related Financial Inventory Report (FIR) code generation of "JC" credits. "JC" credits are created by aviation platforms which operate under End-Use Aviation Depot Level Repairable (AV-DLR) management when material is transferred from one aviation platform to another under end-use AV-DLR management. For example, when inventory is transferred from one carrier to another carrier for an AV-DLR, a credit is immediately provided to the transferring ship to allow for credit to the appropriate OPTAR so that the ship may reorder for stock. In the future, the "JC" credits will not allow the user to immediately reorder for stock until the credits are properly reflected under STARS-FL. This was a major concern by the fleet, as the "JC" credits were immediately used as increased authority in the OPTAR to allow for stock replenishment. The resolution was provided by the Fleet Commander with a policy decision allowing for authority to exceed OPTAR grants only by the amount of "JC" credits pending when the initial allotment of OPTAR dollars by the Type Commander had been obligated. Use of "JC" credits were not authorized in the OPTAR in the ship still had an uncommitted balance of funds.

d. Direct billing of Fuel Expenditures

STARS-FL would not allow any expenditure greater than \$250.00 to process without a preceding obligation on file. However, the fleet was concerned that issues of fuel to flight crews and other users did not always have a preceding obligation and were a form of direct billing. The decision was made to allow for direct billing of fuel related transactions.

E. WHAT STEPS COULD BE TAKEN TO STREAMLINE DETAILED OBLIGATIONAL REPORTING UNDER GENERAL FUNDS MANAGEMENT?

With STARS-FL, the current process of biweekly reporting of detailed obligations and cancellations could be eliminated. From the fleet's perspective, current bi-weekly reporting could be made easier with daily file transfers of obligations and cancellations. Additionally, STARS-FL will accept incoming expenditures from outside activities on a daily basis for an online financial reconciliation effort instead of waiting for the monthly reconciliation currently conducted by the FRAM system. One other benefit of STARS-FL would be the automated File Transfer Protocol (FTP) capability which allows for satellite communication over the INTERNET for financial reporting and reconciliation. This would allow for the elimination of the mailing of large amounts of financial listings to and from the fleet.

The requirement for the monthly Budget OPTAR Report (BOR) could also be eliminated. With detailed obligations and cancellations being forwarded daily, the STARS-FL program could summarize the data ashore and create the BOR for Type Command review. The only other financial data required from the ship would be those unique Type Commander reporting requirements provided under separate Type Commander financial guidance.

Removing the requirement for biweekly transmittal reporting and monthly BOR reporting would greatly reduce workload afloat in the financial area and allow for that workload to be transferred ashore to the OPLOC and Type Commander.

VII. AGED UNFILLED ORDER LISTINGS (AUOLs) AND SUMMARY FILLED ORDER EXPENDITURE DIFFERENCE LISTINGS (SFOEDLs) AUTOMATION

A. GENERAL

This chapter reviews what steps are being taken to automate the financial listings forwarded to the fleet from the OPLOCs for financial reconciliation. These listings include the Aged Unfilled Order Listing (AUOL) and the Summary Filled Order Expenditure Difference Listing (SFOEDL) used for general funds management or OPTAR accounting. Emphasis will be placed on how the process could be accomplished under the Fleet Resource Accounting Module (FRAM) and later with the Standard Accounting and Reporting System, Field Level (STARS-FL) system. With automation, the overall objective would be the elimination of the mailing of paper listings to the fleet and employment of a more efficient manner of transmitting unreconciled financial data from the OPLOC to the Type Commander and fleet customers via automated media for processing to the ship's database.

First there will be a review of the current production of the Aged Unfilled Order Listing, which includes all requisitions held as outstanding by the OPLOC as unfilled orders greater than 90 days old. This review will also include the plan to provide data on all unfilled orders, regardless of age, listed as outstanding by the OPLOC. Second, an overview will be provided of the new Requisition Information Management Analysis and Reporting System (RIMARS) and how this program and associated reports may be used to remove or reduce financial management of unfilled orders afloat and transfer this workload to a centralized database ashore under the administration of the Type Commander or Navy Inventory Control Point (NAVICP). Finally, there will be a review of the financial reconciliation process and the matching of obligations to subsequent expenditures. This results in the production of the Summary Filled Order Expenditure Difference Listing (SFOEDL) and the potential automation of this process.

B. UNFILLED ORDER FINANCIAL RECONCILIATION

1. Current Aged Unfilled Order Listing (AUOL) Management

As pointed out in Chapter II, the Aged Unfilled Order Listing is produced by the appropriate OPLOC under general funds management as part of the financial reconciliation process. Currently, those requisitions which have been outstanding for at least 90 days from the date of the requisition are listed on the Aged Unfilled Order Listing (AUOL). The first Aged Unfilled Order Listing for a particular fiscal year is produced in January. This is 90 days after the beginning date of the fiscal year (October 1). This AUOL will reflect only those aged unfilled orders for the month of October for which an expenditure or cancellation transaction had not be received. As illustrated in Chapter II, the AUOL is produced and distributed monthly to all OPTAR holders starting with the 4th month of the fiscal year and for every month thereafter until the 15th month (i.e., the third month after the end of a fiscal year). After the 15th month, the AUOL is produced quarterly; and it lists all outstanding unfilled orders in document number sequence for a given fiscal year. [Ref. 7: p. 4-70]

2. Total Unfilled Order Management

With the production of the AUOL, the afloat financial manager saw only those requisitions which were outstanding at the OPLOC more than 90 days. Once the obligation was listed on the AUOL, the transaction would not appear again for another 90 days unless the obligation was matched to an incoming expenditure or canceled. Although this may have reduced some workload for the afloat financial manager, total detailed data on unfilled orders outstanding on the OPLOC database was unavailable unless specifically requested by the afloat unit. Today, total detailed unfilled order data is essential for the afloat financial manager to help in validating outstanding obligations. Through an automated process, requisitions no longer required can be deobligated in a more timely and efficient manner, allowing for redistribution of scarce resources for future procurements within a fiscal year.

C. THE REQUISITION INFORMATION MANAGEMENT ANALYSIS AND REPORTING SYSTEM (RIMARS)

1. RIMARS Overview

The Requisition Information Management Analysis and Reporting System (RIMARS) is an automated reporting capability currently under development by the Navy Management Assistance Support Systems Office (NAVMASSO) Chesapeake, VA and Commander Naval Surface Forces, Atlantic Fleet (COMNAVSURFLANT). This Naval Supply Systems Command (NAVSUP) sponsored program is another step in the initiatives to redistribute workload afloat to a centralized database maintained ashore by the Type Commander and/or Navy Inventory Control Point (NAVICP).

Using the Force Inventory Transmission System Download (FITS DL) utility outlined in Chapter III, the objective would be to develop a centralized database ashore which contained all outstanding and completed requisition data including all status subrecords required for stock replenishment and Direct Turn Over (DTO) requisition management. RIMARS was designed to facilitate intensified management of ships' outstanding requisitions and related financial accounting OPTAR reconciliation processes for the afloat Supply Officer, Type Commanders (TYCOMs) and Defense Finance and Accounting Service Operating Locations (DFAS OPLOCs). RIMARS creates a new paradigm, where shipboard outstanding and completed requisitions and OPLOC financial accounting reconciliation information merge and become interrelated. [Ref. 25, p. 1]

Through FITS DL, detailed requisition information could be forwarded ashore on a daily basis from the ships to a centralized computer system for review and maintenance of outstanding and completed requisition information. Once the data was ashore in a centralized PC environment, all requisition and financial information regarding detailed unfilled order management could be handled ashore with only exception data being forwarded to the fleet for review.

2. Financial Reconciliation of Unfilled Orders Under RIMARS

The FITSDL program for downloading of requisition information from ships to an ashore centralized database will be ready for testing in July of 1996. Once this utility has been tested and released to the fleet, requisition information could be transmitted ashore for management review under RIMARS. An enhancement for RIMARS will allow for detailed unfilled order reconciliation to be conducted ashore between the OPLOC, TYCOM or NAVICP (wherever RIMARS is managed). Several steps would be required in order to have RIMARS successfully assist in reconciling unfilled orders held by the OPLOC with outstanding requisitions listed in RIMARS. These steps include:

- The OPLOC would be required to provide an automated data file on a periodic basis of unfilled orders held as outstanding for each Operating Budget (OB) holder. Details on generation of the automated unfilled order file could be resolved using the FRAM system with eventual migration to STARS-FL. The total Unfilled Order file maintained by the OPLOC could be extracted as often as desired. The Type Commander recommendation was a minimum of once per month.
- RIMARS would require modification to allow unfilled order data to be read into the database for matching against requisition data.
- A series of reports would be required in reconciling unfilled orders against outstanding and completed requisition data maintained in RIMARS. These reports would include Requisitions Outstanding at OPLOC and in RIMARS, Requisitions Outstanding as Unfilled Orders at OPLOC and completed (less than 90 days) in RIMARS, Requisitions Outstanding as Unfilled Orders at the OPLOC and completed (greater than 90 days) in RIMARS, Requisitions Outstanding as Unfilled Orders at OPLOC with no record in RIMARS, and Requisitions Outstanding in RIMARS with no Unfilled Order at

the OPLOC. The following section will provide more detailed information on the reports under development.

3. Automated Reconciliation Reports of Detail Unfilled Orders Under RIMARS

Once the unfilled order data was received in an automated format from the OPLOC, the data file provided could be run against the requisition data base (RIMARS) for detailed matching and processing. The following categories and reports are currently being considered for automating the detailed unfilled order reconciliation process.

a. *Category 1 Requisitions Outstanding at OPLOC and in RIMARS*

Those transactions listed as outstanding in both systems could be processed to an exception file, with all detailed data provided from the OPLOC and outstanding requisition file, including all status subrecords. This file could be used later in taking appropriate follow-up action in obtaining updated status or for Material Obligation Validation (MOV) in reviewing outstanding requisitions. However, for financial reconciliation, no further action would be required.

b. *Category 2 Requisitions Outstanding as Unfilled Orders at OPLOC and Completed Less Than Some Threshold Date*

The threshold completion date is usually set between 60 and 90 days after the completion of the requisition, depending on the Type Commander. This date is used for determining if aged unfilled orders should be administratively canceled and the dollar value of the obligation recaptured. RIMARS will allow for whatever number of days completion are required based on Type Commander guidance. These transactions could be forwarded to an exception file for review if desired. For financial reconciliation, no further action would be required, since the requisitions would be less than the established threshold date determined by the respective Type Commander.

**c. *Category 3 Requisitions Outstanding as Unfilled Orders
at OPLOC and Completed Greater Than Some Threshold
Date***

This category would represent all requisitions which were listed as detailed unfilled orders at the OPLOC but completed in the requisition file greater than the Type Commander established threshold date from date of completion. Currently, this process is a manual validation from a hard copy aged unfilled order listing against the ship's requisition file to determine when the requisition was completed. Through automation, these transactions could be written to an exception file for further processing. Transactions completed greater than the threshold date but remaining as outstanding at the OPLOC represent potential administrative cancellations in accordance with current directives. Of all the transactions listed as unfilled orders remaining at OPLOC, these transactions require the closest review because they represent obligations which may be recaptured. Therefore, the exception file created from this category could be transmitted to the fleet unit from the centralized RIMARS database for further review and processing. For financial reconciliation, these transactions require further shipboard review.

**d. *Category 4 Requisitions Outstanding as Unfilled Orders
at OPLOC with No Record in RIMARS***

This category would represent all requisitions listed as unfilled orders at OPLOC with no record of the requisition in RIMARS. Technically, this should not happen, because all obligations recorded in the ship's requisition file are reported to the OPLOC in the form of a financial transmittal. However, on occasion a transaction may be garbled or may not process correctly to the OPLOC unfilled order file and, thus, could result in a mismatch. Currently, this process is a manual validation from the hard copy aged unfilled order listing to the ship's requisition file. Those unfilled orders which have no records in the requisition file could be administratively canceled and the funds deobligated at the OPLOC.

e. Category 5 Requisitions Outstanding in RIMARS with No Unfilled Order at the OPLOC

This category would represent all requisitions which were listed as outstanding in the requisition file (RIMARS) with no unfilled order at the OPLOC. As noted earlier, when a requisition is generated, a financial obligation document (unfilled order) is forwarded to the OPLOC on the next financial transmittal. The only way an unfilled order can be completed once it is transmitted on the financial transmittal to the OPLOC is through a follow-on expenditure match or subsequent cancellation (deobligation) on a later financial transmittal. Any requisition which has no unfilled order at the OPLOC should be carefully reviewed to determine if the material had not been received onboard the ship. In some cases, status of the requisition indicates that the requisition is a valid outstanding requirement but a financial obligation document was not transmitted to the OPLOC on a financial transmittal. However, often the situation is a result of an expenditure processing for the unfilled order at the OPLOC, with the ship not properly processing a receipt for the outstanding requisition. These transactions should be written to an exception file for further review by the ship.

4. Automated Type Commander and Shipboard Feedback From RIMARS

Once the unfilled order file was loaded to RIMARS and the reconciliation program was executed, the five categories or reports would be written to an exception file for further review and processing. Those transactions in Categories 1 and 2 could be summarized for information to the Type Commander on the number of transactions validated, with associated money values by expense element or fund code. Detailed transactions in categories 1 and 2 would be forwarded to the ship for information with no further action required. Those transactions in Categories 3, 4 and 5 would also be summarized for information to the Type Commander in the same manner as categories 1 and 2, with detailed transactions being forwarded to the fleet.

A significant benefit may be realized through a centralized automated processing of unfilled order reconciliation. Through the use of RIMARS, detailed manual listings would no longer be required to be mailed by the OPLOC for each ship in the fleet. Detailed unfilled orders could be extracted by the Type Commanders as desired, instead of waiting for weekly, monthly or quarterly unfilled order reviews, and processed through RIMARS as indicated. Using a centralized database with all requisition information retained ashore will significantly reduce the current manual workload in the fleet. The current validation process of hard copy aged unfilled order listings with detailed query of shipboard requisition files could be eliminated.

Under RIMARS, the Type Commander could accurately determine the value of valid unfilled orders by expense element or fund code for any given fiscal year or Operating Budget (OB). In addition, those requisitions which were validated as unfilled orders at OPLOC and in RIMARS could be reviewed for potential cancellation under the Material Obligation Validation (MOV) program. Those items no longer required could be canceled, resulting in a redistribution of scarce OPTAR dollars for valid unfunded requirements.

The RIMARS program could be established at a centralized database at the Type Commander or other centralized processing activity such as the Navy Inventory Control Point. The important issue would be that summary data, as a result of the unfilled order reconciliation, must be made available to the appropriate Operating Budget (OB) holder. As previously mentioned, detailed data by Category would be transmitted as required to the fleet for review and processing.

Figure 7.1 represents a potential document flow for reconciliation of unfilled orders held by the OPLOC against the RIMARS database, whether the database is administered at the appropriate Type Commander or Navy Inventory Control Point, using the Streamline Automated Logistics Transmission System (SALTS). The numbered boxes are provided to assist the reader with the document flow. Each numbered box corresponds to the appropriately numbered text.

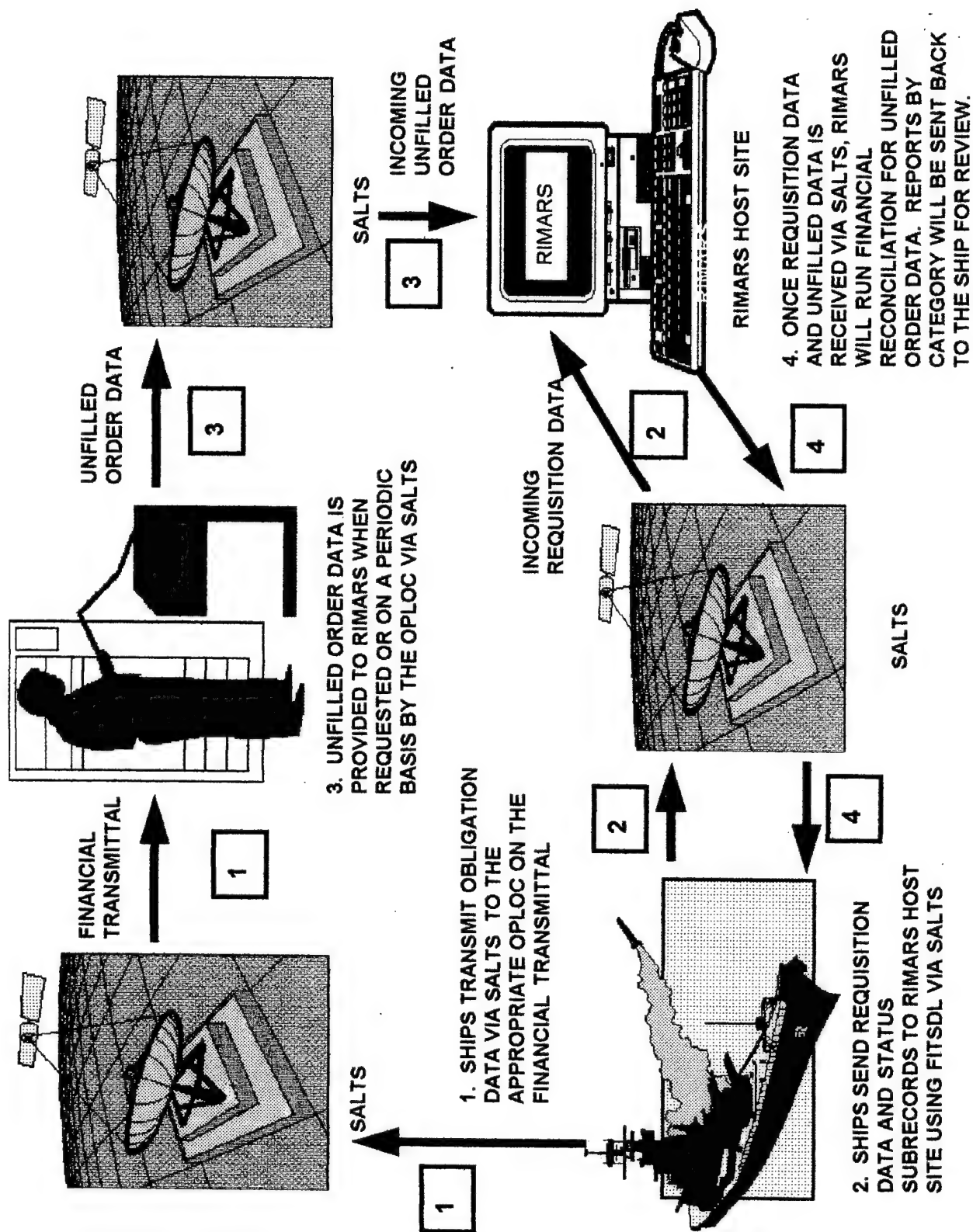


Figure 7.1 Document Flow For Reconciliation of Unfilled Orders

D. SUMMARY FILLED ORDER EXPENDITURE DIFFERENCE LISTING (SFOEDL) RECONCILIATION AND AUTOMATION

1. Current SFOEDL Production

As pointed out in Chapter II, the current SFOEDL is produced by the appropriate OPLOC under general funds management as part of the financial reconciliation process. It is produced and distributed monthly for the first twenty-four months of the fiscal year and then quarterly thereafter, through the 33rd report month. [Ref. 7: p. 4-104]

Currently, the SFOEDL is produced by the Fleet Resource Accounting Module (FRAM) system owned by the DFAS at the respective OPLOCs. The listings produced represent partially matched and totally unmatched expenditures recorded against obligations provided to the OPLOC by the fleet. Once the listings are produced, they are forwarded to the fleet for review and action.

For an unmatched or mismatched condition, detailed obligation data is provided (when available), followed by the incoming expenditure. A comparison is made based on the extended money value of the obligation and expenditure. Any difference between the obligation and expenditure processed is reflected within the detailed information as a credit or debit transaction on the SFOEDL. These debit or credits are directly applied to the ship's OPTAR. A debit (charge) transaction results when the obligated amount is less than the expended amount. A credit transaction results when the obligated amount is greater than the expended amount. All detailed differences reflected in the SFOEDL are summarized at the end of the listing by expense element or fund code. These credits or debits are direct charges and must be posted to the ship's financial subsystem upon receipt of the SFOEDL hard copy listing. In most cases, summarized difference data is posted to the afloat financial subsystem via a batch process by expense element or fund code. Once the SFOEDL is received by the ship, the most important step is to post the differences to the ship's financial files because these differences have already been reflected on the official accounting records maintained by the OPLOC.

2. The Impact of STARS-FL On Unmatched Expenditure Processing

The current understanding concerning STARS-FL and the processing of unmatched difference processing is that STARS-FL will process differences much like the existing financial system (FRAM) does today. However, there have been some recommended changes to this process to help in reducing workload afloat as a result of the number of differences received for expenditures not matching obligations. The overall recommendation has been to approach the reconciliation of unmatched expenditures with recommended changes to the business rules coupled with three phases in programming changes to reduce financial workload afloat in processing difference listings.

a. Phase I The Elimination of Hard Copy Reports

Under phase I, the goal would be the immediate elimination of hard copy listings which are mailed out to the fleet on a monthly basis, as indicated earlier. In some cases, current SFOEDLs under the FRAM system don't reach the fleet unit for as much as 60 days after the listing was produced because of mailing overseas. The goal would be to replace the hard copy reports with a digital or automated file that could be transmitted to fleet customers through the Streamline Automated Logistics Transmission System (SALTS) or other electronic media. Elimination of the hard copy reports solves an immediate need to provide the fleet with more timely delivery of the differences and eliminates the DFAS requirement to handle and mail hard copy reports. Some benefits in the area of transmitting difference data through SALTS have been realized with the Automated Travel Order System (ATOS) used by the OPLOC and Type Commander in managing travel obligation and expenditure processing. The benefits realized from ATOS could be incorporated with the forwarding of SFOEDLs through an automated media. [Ref. 26]

b. Phase II Techniques for Detailed Automated Difference Posting

Under this phase, techniques could be developed to provide for an automated file of detailed debit and credit differences to be sent to the ship through an electronic media for direct posting to the ship's financial subsystem for memorandum accounting or departmental budget reporting purposes. Automated difference listing processing has also been used in the past with the Automated Travel Order System (ATOS) in posting detailed differences to the PC-based travel system. [Ref. 26]

With automated difference posting directly to the ship's financial subsystem, manual listings and manual posting by batch or detail could be eliminated. Automated difference posting would allow for a more timely and accurate reflection of current obligations and available OPTAR balances. Phase II could be developed under the the Relational Supply (R-Supply) programming standardization initiatives for the financial subsystem mentioned in Chapter III.

c. Phase III Incorporation of Business Rule Changes within Relational Supply

Significant discussion continues concerning ways in which financial business rules could be changed to help in providing accurate financial reporting while reducing unmatched disbursements or expenditures. These business rules have included discussions, outlined in Chapter VI, on issues involving detailed processing by dollar threshold with the threshold set at \$250 vice \$100; the development of a suspense file for transactions where the expenditure exceeded the obligation or the expenditure had no previous obligation; and the most recent discussion of a potential programming decision to allow for obligation adjustments to be generated when the activity receives the material and the receipt price is different from the obligated price. [Ref. 24]

STARS-FL will not process an expenditure if the dollar value exceeds the obligated amount of the requisition. Under the guidance requested from the Fleet Commanders, this type of transaction is to be forwarded to a suspense file for a period of 60 days. During this period, the fleet unit and the Type Commander can review those unmatched or mismatched transactions and process obligation adjustments as desired prior to the end of the 60 days. Transactions with a difference of less than \$3,000 extended money value will post to the appropriate financial ledgers ashore and detailed transactions will be forwarded to the ship for direct posting, as previously mentioned, after the 60 day suspense period. Those transactions with a difference greater than \$3,000 dollars will be reviewed by the Type Commander prior to direct posting to a ship's OPTAR account. Although a transaction may be placed in a suspense file pending an obligation adjustment or reconciliation, the ship will be able to review those transactions so that erroneous transactions could be corrected as early as possible.

A current recommendation under review involves the generation of an obligation adjustment at time of receipt by the afloat activity within R-Supply. Under this proposal, if an activity failed to obligate enough money at time of requisition, then an obligation adjustment would be generated by the financial subsystem and forwarded to the OPLOC for processing. Since the expenditure is retained in a suspense condition awaiting either an obligation adjustment or a period of 60 days, the obligation adjustment could process and change the total amount of money obligated to match the previously suspended unmatched or mismatched expenditure. Credit adjustments could also be provided at time of receipt by the afloat activity when more money was obligated than required. Under this concept, a significant number of differences could be eliminated, with obligation adjustments (debits or credits as warranted) being automatically forwarded to the OPLOC after receipt of the material. With obligation adjustments automatically generated at time of receipt, the number of unmatched disbursements could be reduced with obligation adjustments allowing the expenditure to properly record and match.

3. The Automation of SFOEDL Processing and Challenging

The most difficult thing in dealing with the Summary Filled Order Expenditure Difference Listing is the processing and subsequent challenging of transactions listed in the details. As mentioned in the last section, one major improvement which could significantly reduce the size of difference transactions would be the ability of R-Supply to generate obligation adjustments when a price change is reported or when the material is received. With the unmatched or mismatched condition initially processing to a suspense or holding file for the first 60 days, a number of transactions could be resolved through an automated obligation adjustment which could be programmed into R-Supply.

As pointed out in Chapter II, the remaining difference transactions reflected on the suspense file at OPLOC must be reviewed to determine if the debit or credit difference is valid. If the debit or credit was determined by the ship to be valid, an obligation adjustment could be forwarded to the OPLOC to help clear the suspended transaction prior to the 60 days. Those transactions still listed as suspended after 60 days without reconciliation would be directly debited or credited to the OPTAR holder (ship).

Potential difference data from the suspense file could be transmitted as desired by the OPLOC to allow the fleet unit to review transactions and take appropriate action as warranted. The items listed in the suspense file (STARS-FL 1960 Report) must be forwarded in an automated media to the fleet unit. A PC-based program could be written to allow incoming suspended transactions to read the respective requisition files and gather data concerning the document in question. This would help in reconciliation of the unmatched transaction.

Once the data was gathered from the mainframe R-Supply computer system, the data could be downloaded to a PC-based intelligent terminal for review and/or processing. The SFOEDL challenge codes defined in Appendix 'C' could become a part of an automated challenge program which could allow the user to select which challenge code was appropriate. Once the transactions were reviewed and

validated or challenged, the challenged transactions with the appropriate challenge information could be written to an automated exception file for further transmission to the respective OPLOCs through the Streamline Automated Logistics Transmission System (SALTS) or via some other automated media.

Once the challenged data was forwarded to the OPLOC through an automated media, a PC based program at the OPLOC could receive the challenges into the STARS-FL system for review by the OPLOC financial accounting technicians via an on-line screen processor. With the automated data received by the ship, the OPLOC technician could easily conduct additional causal research as required in further processing the challenged transaction. Challenged transactions, reviewed and processed by the OPLOC, could then be forwarded to the fleet unit in an automated feedback process which would allow for updating of appropriate afloat memorandum financial records.

Throughout the entire process, an automated means of data processing for SFOEDL related transactions would result in providing a more timely and efficient manner of delivering unreconciled financial transactions to the fleet and back in order to maintain a smaller number of unmatched or partially matched expenditures in the OPLOC suspense file. Figure 7.2 provides a recommended document flow for reconciliation of SFOEDL differences. The numbered boxes in Figure 7.2 are provided to assist the reader with the document flow. Each numbered box corresponds to the appropriately numbered text.

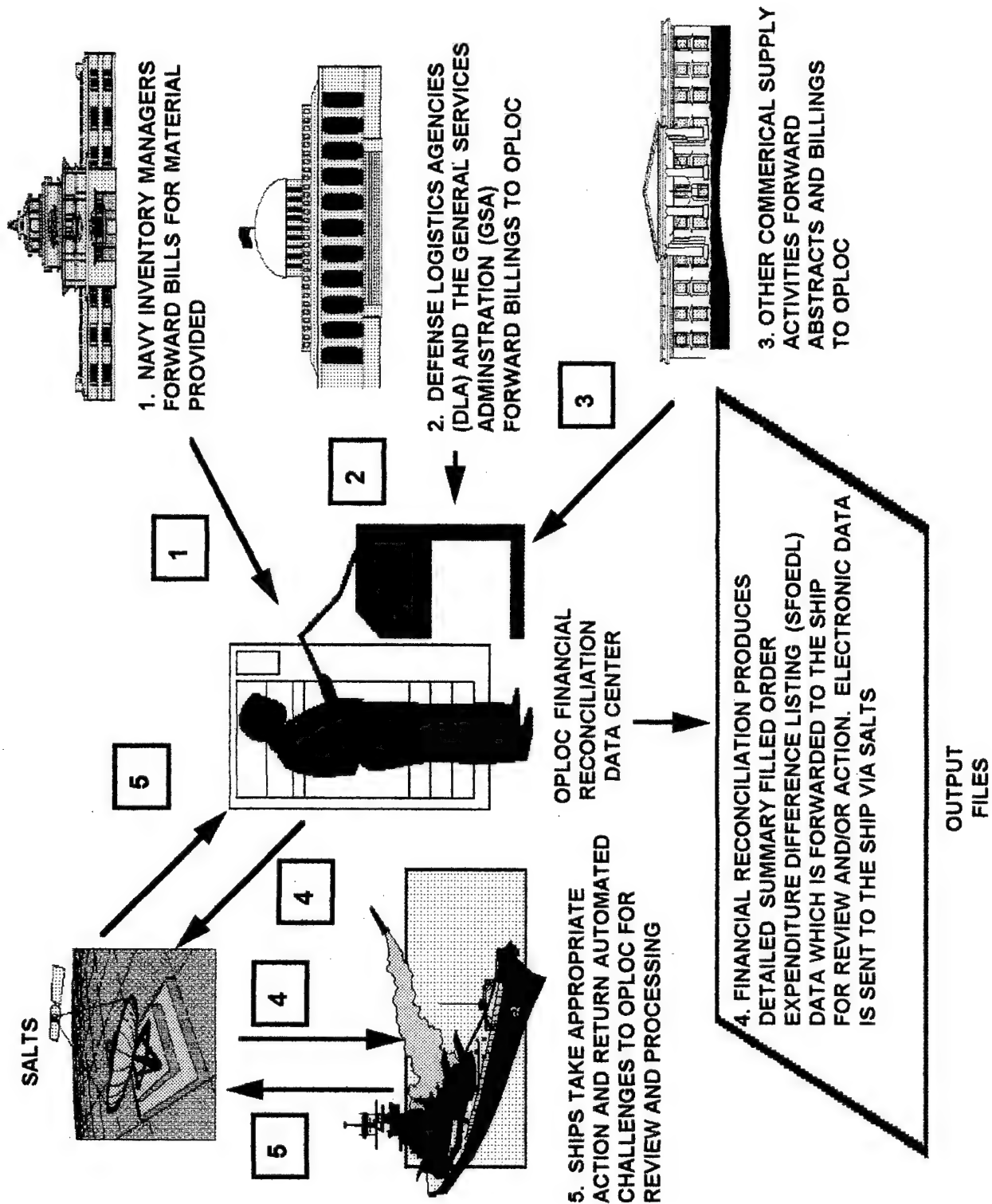


Figure 7.2 Document Flow For Reconciliation of SFOEDL Differences

VIII. CONCLUSIONS AND RECOMMENDATIONS

A. GENERAL

This chapter provides a summary of conclusions and recommendations for Standardized Accounting Ashore For Afloat Activities. In the next section, conclusions and recommendations are organized according to the eight research questions addressed in the thesis. A final section will suggest some areas for further study.

B. RESEARCH QUESTIONS

Primary Question: Can Standardized Accounting Ashore be conducted for all afloat activities using the Defense Business Operations Fund for stores (inventory) accounting and STARS-FL for general funds management and financial accounting?

Yes. By using DBOF, all inventories could be standardized under one general ledger account for financial inventory reporting and management. Under DBOF, all inventories would be centrally managed to allow for asset visibility and inventory management across all afloat platforms. Past practices of not replenishing end use inventories because of funding shortfalls could be eliminated, as inventories would be funded by DBOF, while consumption or sales of inventory would be handled by expenditures of Operating Targets (OPTARs) under general funds management.

STARS-FL provides an excellent resolution for replacement of the 25 year-old FRAM system used for general funds management, or OPTAR accounting. Under STARS-FL, all Direct Turn-Over (DTO) transactions are processed with detailed obligations forwarded to the OPLOC ashore to allow for official financial reporting. Using STARS-FL, all ships could process customer requisitions in the same manner, with detailed reports sent ashore on a daily basis through automated media such as the Streamline Automated Logistics Transmission System.

Standardizing accounting for inventories afloat under DBOF and STARS-FL for general funds management allows for streamlining detailed inventory management and financial reporting ashore. A major benefit is the reduction of workload afloat through the standardization of reporting across the fleet.

Subsidiary Question 1: What are the advantages of Standardized Stores Accounting Ashore for afloat activities using DBOF? This issue includes the cost-benefit analysis of Total Asset Visibility (TAV) for redistribution of excess inventory to satisfy existing material deficiencies in the fleet and wholesale system ashore.

There are numerous advantages for standardizing stores accounting ashore using DBOF. These advantages include:

- "Real-Time" visibility of all afloat assets would be provided.
- With all inventories held under DBOF, redistribution of excess inventories within the fleet to satisfy material deficiencies within the fleet could be done at the cost of transportation of the inventory.
- Wholesale stock requisitions for replenishment of ashore stock points could be screened against afloat excess inventories, with credits provided for material transferred to non-DBOF activities. This would reduce the procurement costs of stock replenishment as material excesses could be used to reduce ashore stock point deficiencies.
- Existing technology could be used to provide available information on range and depth of allowed shipboard stock items. This would be particularly helpful in reviewing ships' readiness indicators prior to deployments.
- With afloat asset visibility, managers could readily identify potential problem areas involving certain inventory items while reviewing storeroom deficiencies and excesses on hand.

- Validation of shipboard allowance data against a centralized database ashore would result in improved accuracy in Coordinated Shipboard Allowance (COSAL) management.
- Training pipelines and costs could be reduced because standardized training packages could be developed for all afloat platforms.

Subsidiary Question 2: What steps would be necessary in reconciliation of afloat inventories not now under DBOF prior to capitalization into DBOF? Would there be a windfall profit for DBOF as a result of capitalization?

The biggest requirement prior to capitalizing afloat inventories into DBOF is the funding of stock deficiencies. One of the steps required prior to conversion to the Material Financial Control System-Retail (MFCS-Retail) is the validation of inventory allowances. The current storeroom stock policy for Type Commanders is that all material is 100% on hand in the storeroom or on order. The only exception to that policy is when there is a funding shortfall for stock replenishment. Under the Fleet Logistics Support Improvement Program (FLSIP), the new allowance model, .5 FLSIP plus COSAL, could be used to validate allowances by ship prior to conversion to DBOF. Under this process, the Type Commander would be responsible for ensuring that all valid stock allowances were either on hand in the storeroom or were on order prior to conversion.

Any storeroom deficiencies could be funded under DBOF with the windfall profit made by selling excess DBOF inventory to Direct Turn-Over (DTO) customers or non-DBOF activities. A windfall profit is generated for the DBOF funds because excess end-use inventories will be capitalized into DBOF without DBOF paying for these inventories. Any sale of excess inventories not bought by DBOF will result in a windfall profit. In the USS Peterson and USS San Jacinto example in Chapter IV, excess inventory worth more than 17 million dollars was available for redistribution or sale. If the material was sold, the DBOF account would be credited

for the sales, and the dollars could be used to fund other DBOF stock deficiencies. In addition, there could be a substantial cost avoidance by transferring excesses to satisfy other ship storeroom deficiencies at the cost of transportation. The cost avoidance would result when OPTAR dollars or DBOF dollars would not be needed to fund storeroom deficiencies.

Subsidiary Question 3: What system would be used to provide material accountability ashore (stores accounting) for afloat inventories? Where would it reside and what activity would manage it?

The Material Financial Control System-Retail (MFCS-Retail) was selected in November 1995 to perform retail stores accounting afloat and ashore by the Assistant Secretary of the Navy for Financial Management and Comptrollership (ASNFM&C) and the Director of the Defense Finance and Accounting Service Headquarters (DFAS HQ). MFCS-Retail design is based on DoD/MILS standards for accounting and financial reporting. Some of the advantages of MFCS-Retail include:

- MFCS provides strict accountability of funds used to procure material and services.
- MFCS is a state-of-the-art system. It was designed to utilize the most current hardware and software technologies available for inventory and financial management.
- Using MFCS for both retail inventory and financial management also means reduced costs in life cycle support for the program. Customer service support is improved with a single system for stores accounting.

The current plan is for the MFCS-Retail system to be run for the Navy by the Navy Inventory Control Point (NAVICP) in Mechanicsburg, PA. Under the concept of Centralized Accounting and Billing (CAB), NAVICP would be responsible for centralized inventory management of all afloat DBOF activities. This would include all stores (inventory) accounting responsibilities.

Subsidiary Question 4: How would Stock-In-Transit (SIT) and Material-In-Transit (MIT) be managed? What reconciliation action is required for previous Other Supply Officer (OSO) and Interfund Billing (IFB) transfers and issues which remain unreconciled at time of conversion to the new stores accounting system?

As pointed out in Chapter V, Stock-In-Transit (SIT) and Material-In-Transit would be centrally managed by NAVICP. All unmatched issues and receipts, including Stock-In-Transit (SIT), Material-In-Transit (MIT) and Accounts Payable related transactions, would be reviewed and reconciled ashore by use of automated media for causal research and reconciliation. Under the Centralized Accounting and Billing (CAB) procedures, afloat activities would provide Transaction Item Reports (TIRs) of issues, receipts and adjustments. The inventory and financial reconciliation related to stores accounting would be administered by NAVICP.

As pointed out in Chapter V, all unmatched matched receipts and expenditures that are unmatched greater than 90 days at the OPLOC will require reconciliation prior to conversion to MFCS-Retail. As of April 1996, the total unmatched receipt dollar value for all afloat DBOF activities was \$1,203,026,000 for a total of 357,437 records. Additionally, the total unmatched expenditure dollar value was \$373,212,000 for a total of 166,044 records. Discussions are currently underway between NAVSUP, NAVICP, OPLOC and the Type Commanders on what steps could be taken to reduce the number of unmatched transactions prior to conversion to the MFCS-Retail system. This is one of the biggest challenges that requires resolution prior to implementing MFCS-Retail.

Subsidiary Question 5: What actions would be taken to validate a Proof Of Shipment (POS) from an afloat activity for material issued or transferred to other activities?

Under the current procedures afloat, there is no automated feedback available for Proof Of Shipment (POS). Current discussion has included a need for the afloat supply system software, Relational Supply (R-Supply), to have an automated capability to provide POS when queried by NAVICP through an automated Receipt Of Discrepancy (ROD). The objective would be that when a transaction occurs afloat, detailed data would be transmitted ashore through the Transaction Item Reporting (TIR) process, with an automated POS document retained on the computer database. If an automated ROD was later transmitted by NAVICP to the afloat platform, an automated POS document would be transmitted in response. This automated process would significantly reduce afloat workload required for working unmatched receipts and expenditures.

Subsidiary Question 6: What steps could be taken to streamline detailed obligational reporting under general funds management to help eliminate the need for bi-weekly financial transmittals and monthly Budget Operating Target (OPTAR) reporting?

Under the Standard Accounting and Reporting System, Field Level (STARS-FL) system, detailed obligations and cancellations could be sent on a daily basis to the OPLOC under general funds management. Bi-weekly reporting through financial transmittals and Budget OPTAR reporting were conducted under the Fleet Resource Accounting Module (FRAM). However, with STARS-FL, detailed transactions could be forwarded to the OPLOC daily for updating of on-line financial data for the OPLOC and Type Commander. If financial data was transferred ashore daily, the financial transmittal and Budget OPTAR report could be eliminated.

Subsidiary Question 7: What steps could be taken to automate Aged Unfilled Order Listings (AUOLs) and Summary Filled Order Expenditure Difference Listings (SFOEDLs) used for general funds management or OPTAR accounting?

The production of the financial exception listings to include the AUOL and SFOEDL are a result of the financial reconciliation process under the FRAM system for general funds management. As pointed out in Chapter VI, through the implementation of the Requisition Information Management System (RIMARS), centralized requisition management and review could be done ashore. Under that scenario, all detailed unfilled orders could be validated against the centralized requisition database ashore, with only exception detailed unfilled orders being sent to the ships for review and resolution, as outlined in Chapter VII. Detailed unfilled orders could be transmitted to a centralized requisition management database ashore under RIMARS for reconciliation.

In addition, detailed expenditure documents in the form of credits and debits could be provided to the ship by an automated media for transactions in which the dollar value of the obligation did not match the dollar value of the expenditure. Through advanced obligation adjustments, under Relational Supply, the number of differences received by the ship could be significantly reduced. Detailed difference data including the original obligation, expenditure and difference amount could be provided to the ship through automated media on a daily basis. This could be done by providing the ship daily access to the STARS-FL suspense report (Report 1960). Transactions not reconciled through an obligation adjustment would be directly applied to the OPTAR after a period of 60 days.

The major objective would be the elimination of hard copy listings and the "real-time" access to unmatched OPTAR related transactions on a daily basis. Additionally, if the detailed data was forwarded to the ship in an automated media, the financial records could be updated in a timely and efficient manner.

C. AREAS OF FURTHER STUDY

1. The Billing Cycle For Stores Accounting

As pointed out in Chapter II, expenditures are forwarded to the respective OPLOCs through a variety of media on a monthly basis. These expenditures include Other Supply Officer (OSO) summaries, bills from non-Navy activities and abstracts from commercial vendors. On occasion, duplicate expenditures are received or expenditures are received which are missing key data elements for processing at the OPLOC. Could expenditures be forwarded and processed on a daily basis by the appropriate OPLOC? What steps could be taken to reduce the number of duplicate or erroneous expenditures forwarded to the OPLOC for financial reconciliation? Is there a standard Navy billing procedure which should be followed with mandatory data elements which are required to be completed by the billing activity prior to processing at the OPLOC?

2. Fleet Difference For Unmatched Receipts and Expenditures For Afloat DBOF Activities

As pointed out in Chapter V, the total unmatched receipt dollar value for the April 1996 A&G listing was \$1,203,026,000 with 357,437 records unmatched. The total unmatched expenditure dollar value for the April 1996 C&H listing was \$373,212,000 with 166,044 records unmatched. However, the difference between the Fleet Commanders (East vs West coast) was significant. The unmatched receipt dollar value for CINCPACFLT's (West coast) A&G listing was almost three times the dollar value of CINCLANTFLT's (East coast) dollar value. The unmatched expenditure dollar value for CINCPACFLT's C&H was two and a half times the dollar value of CINCLANTFLT's dollar value. What could cause the disparity between Fleet Commanders? What financial reconciliation procedures are being taken by CINCLANTFLT activities that are different from CINCPACFLT activities? What differences are there between the two respective OPLOCs which could cause the disparities in unmatched transactions?

APPENDIX A. DBOF AFLOAT ACTIVITIES

This appendix represents an alphabetical list of all afloat activities currently operating under the Defense Business Operations Fund (DBOF). An asterisk (*) indicates that the activity is currently being decommissioned (Decom).

Activity Name	Unit Identification Code (UIC)	Fleet	Decom
HMX-1	V55616	Atlantic	
Marine Aviation Group 40	V55576	Atlantic	*
Marine Aviation Logistics Squadron 11	R67641	Note 1	Pacific *
Marine Aviation Logistics Squadron 11	R09111	Pacific	
Marine Aviation Logistics Squadron 12	R09112	Pacific	
Marine Aviation Logistics Squadron 13	R57082	Pacific	
Marine Aviation Logistics Squadron 14	V09114	Atlantic	
Marine Aviation Logistics Squadron 16	R55583	Note 1	Pacific *
Marine Aviation Logistics Squadron 16	R09116	Pacific	
Marine Aviation Logistics Squadron 24	R09124	Pacific	
Marine Aviation Logistics Squadron 26	V09167	Atlantic	
Marine Aviation Logistics Squadron 29	V52841	Atlantic	
Marine Aviation Logistics Squadron 31	V09131	Atlantic	
Marine Aviation Logistics Squadron 32	V09132	Atlantic	*
Marine Aviation Logistics Squadron 36	R09136	Pacific	
Marine Aviation Logistics Squadron 39	R09808	Pacific	
NAS Fallon	R68971	Pacific	
NSSF New London	V68316	Atlantic	
SIMA Charleston	V52903	Atlantic	*

Note 1: These activities and respective UICs were part of Desert Shield/Desert Storm and are no longer required. They are in a decommissioned status.

Activity Name	Unit Identification Code (UIC)	Fleet	Decom
SIMA San Diego	R65918	Pacific	
STRAT COMM Wing One	R55575	Pacific	
USNS Concord (TAFS-5)	V05836	Atlantic	
USNS Mars (TAFS-1)	R05831	Pacific	
USNS Saturn (TAFS-10)	V46649	Atlantic	
USNS Sirius (TAFS-8)	V45515	Atlantic	
USNS Spica (T-AFS-9)	R21804	Pacific	
USS Abraham Lincoln (CVN-72)	R21297	Pacific	
USS Acadia (AD-42)	R21047	Pacific	
USS America (CV-66)	V03366	Atlantic	
USS Belleau Wood (LHA-3)	R20633	Pacific	
USS Boxer (LPH-4)	R21808	Pacific	
USS Canopus (AS-34)	V04720	Atlantic	
USS Cape Cod (AD-43)	R21063	Pacific	
USS Carl Vinson (CVN-70)	R20993	Pacific	
USS Constellation (CV-64)	R03364	Pacific	
USS Dixon (AS-37)	R20132	Pacific	
USS Dwight D. Eisenhower (CVN-69)	V03369	Atlantic	
USS Emory S. Land (AS-39)	V20635	Atlantic	
USS Enterprise (CVN-65)	V03365	Atlantic	
USS Essex (LHA-2)	R21533	Pacific	
USS Forrestal (CV-59)	V03359	Atlantic	*
USS George Washington (CVN-73)	V21412	Atlantic	
USS Fulton (AS-11)	V04619	Atlantic	*
USS Guadalcanal (LPH-7)	V07352	Atlantic	*
USS Guam (LPH-9)	V07178	Atlantic	
USS Holland (AS-32)	R04696	Pacific	
USS Hunley (AS-31)	V04689	Atlantic	*

Activity Name	Unit Identification Code (UIC)	Fleet	Decom
USS Inchon (MCS-12)	V20009	Atlantic	
USS Independence (CV-62)	R03362	Pacific	
USS Iwo Jima (LPH-2)	V07350	Atlantic	*
USS Jason (AR-8)	R08810	Pacific	
USS John C. Stennis (CVN-74)	V21847	Atlantic	
USS John F. Kennedy (CV-67)	V03367	Atlantic	
USS Kearsarge (LHD-3)	V21700	Atlantic	
USS Kitty Hawk (CV-63)	R03363	Pacific	
USS L. Y. Spear (AS-36)	V05851	Atlantic	
USS McKee (AS-41)	R21118	Pacific	
USS Midway (CV-41)	R03341	Pacific	*
USS Nassau (LHA-4)	V20725	Atlantic	
USS New Orleans (LHA-11)	R07202	Pacific	
USS Niagara Falls (AFS-3)	R05834	Pacific	
USS Nimitz (CVN-68)	R03368	Pacific	
USS Okinawa (LPH-3)	R07351	Pacific	*
USS Orion (AS-18)	V04628	Atlantic	*
USS Peleliu (LHA-5)	R20748	Pacific	
USS Prairie (AD-15)	R04620	Pacific	*
USS Proteus (AS-19)	R04629	Pacific	*
USS Puget Sound (AD-38)	V05837	Atlantic	
USS Ranger (CV-61)	R03361	Pacific	*
USS Saipan (LHA-2)	V20632	Atlantic	
USS Samuel Gompers (AD-37)	R04648	Pacific	
USS San Diego (TAFS-6)	V20116	Atlantic	
USS San Jose (TAFS-7)	R20118	Pacific	
USS Saratoga (CV-60)	V03360	Atlantic	*
USS Shenandoah (AD-44)	V21098	Atlantic	

Activity Name	Unit Identification Code (UIC)	Fleet	Decom
USS Sierra (AD-18)	V04638	Atlantic	*
USS Simon Lake (AS-33)	V04697	Atlantic	
USS Sylvania (AFS-2)	V74025	Atlantic	*
USS Tarawa (LHA-1)	R20550	Pacific	
USS Theodore Roosevelt (CVN-71)	V21247	Atlantic	
USS Tripoli (LPH-10)	R07198	Pacific	
USS Vulcan (AR-5)	V08808	Atlantic	*
USS Wasp (LHD-1)	V21560	Atlantic	
USS White Plains (AFS-4)	R05835	Pacific	
USS Yellowstone (AD-41)	V21046	Atlantic	
USS Yosemite (AD-19)	V04639	Atlantic	*

APPENDIX B. FINANCIAL INVENTORY REPORT (FIR) CODES

Financial Inventory Report (FIR) codes are two digit, alpha-numeric codes established to identify the various types of transactions affecting the financial records of the Defense Business Operations Fund (DBOF). This list of codes and definitions was adapted from the Financial Management Seminar Instructor's Guide developed by CACI Incorporated for Commander Naval Air Forces Atlantic Fleet (COMNAVAIRLANT). This guide was used to teach afloat DBOF managers the various principles associated with DBOF financial management afloat. The first set of FIR Codes listed represents the Navy Stock Account (NSA) functional account 51000. The second set of FIR Codes listed represents the End-Use functional account 55000.

Code	Definition
A1	Receipt from procurement (Commercial). Represents the value of material received from commercial sources. The Shipboard Uniform Automated Data Processing System - Real Time (SUADPS-RT) software receiving and unmatched operations fund transaction adjustment functions assign this FIR code whenever the routing identifier data field is blank and personnel enter data in the DFAS Code/Contract Number or Imprest Fund data fields.
A3	Receipt from procurement (DLA/GSA). Represents the value of material received from services and agencies of the Department of Defense, Defense Logistics Agency (DLA), or General Services Administration (GSA). SUADPS-RT receiving and unmatched operations fund transaction adjustment function assigns this FIR code when the routing identifier assigned is not for a Navy activity.
A4	Material Returns (DLA activities) (This applies to all Aviation related DBOFactivities). Represents the value of aviation fuel (Cognizance Symbol 9X) offloaded to DLA activities; always appears as a credit amount. SUADPS-RT assigns this FIR code to Cognizance Symbol

Code	Definition
	9X Material Requirement External (MRE) offload transactions when personnel entered the receiving DLA activity in the DLA non-privileged validation table.
B2	Receipts Without Reimbursement (Cognizance Transfers). Represents the value of material transferred to a Navy Stock Account (NSA) cognizance symbol from another NSA cognizance symbol because of change notice processing. Also assigned when a NSA receipt transaction processes with a cognizance symbol different from the NSA cognizance symbol assigned to the applicable Basic Material File (BMF) record. The old or receipt cognizance symbol reflects a corresponding FIR Code K3 entry.
B4	Receipts Without Reimbursement (Capitalization). Represents the value of material transferred to a cognizance symbol in one stores account from a cognizance symbol in another stores account (for example: NSA to APA) because of change notice processing. Also assigned to receipts of NSA material initially charged to procurement funds other than the Defense Business Operations Fund (for example: initial outfitting funds).
D3	Inter-Cognizance symbol Transfers to Cognizance Symbol 1Q. Represents the value of material transferred from one cognizance symbol to cognizance symbol 1Q. Assigned by SUADPS-RT for the transfer of material to a ship's store (for example: Fund Code NZ cited on the transfer record). A corresponding entry under FIR Code MA appears for the original cognizance symbol.
D4	Inventory Adjustments (Gains) Physical Inventory. Represents the value of financial adjustments caused by bringing stock records (BMF) into agreement with the actual count of material on hand (result of physical inventory).

Code	Definition
D5	Inventory Adjustments (Gains) Incoming Shipments. Represents the value of inventory gains caused by overages of material received.
D7	Inventory Adjustments (Gains) From Cognizance Symbol (COG) 1Q. Represents the value of transfers to another COG symbol from COG 1Q. Assigned by SUADPS-RT when material is received from a ship'sstore.
E1	Financial Adjustments (Gains) Standard Price. Represents the adjustments required to bring the prices at which personnel received material by purchase action into agreement with the standard price or new Basic Material File (BMF) record price. Applies to receipt transactions recorded in FIR Code A1 or A3.
E2	Financial Adjustments (Gains) Standard Price. Represents the adjustments required to bring the prices at which personnel received material into agreement with the standard price established on the Basic Material File (BMF) record. Applies to receipt transactions recorded in FIR Code F4. Also used for adjustments to standard prices caused by change notice processing (annual or monthly price changes).
E4	Financial Adjustments (Gains) Accounting Adjustments. Represents the difference between the total extended money value of the Basic Material File (BMF) on hand quantity and the closing inventory value from the Financial Inventory Report. Only reflects adjustments accomplished or provided by the Navy Management Systems Support Office (NAVMASSO) representative or detachment.
F4	Receipts from Other Supply Officers. Represents the value of material received from Navy or Marine Corps activities that processed the issue of material under FIR Code P4.

Code	Definition
F5	Receipts From Other Supply Officers (SERVMART). Represents the value of material received from Navy and Marine Corps SERVMART activities. SUADPS-RT assigns this FIR Code to money value only (MVO) receipts that have SERVMART Special Accounting Class 260 in the stock number data field. FIR Code F5 only appears on the 9G cognizance symbol section of the Navy Stock Account (NSA) FIR.
H1	Opening Inventory. Represents the inventory at the beginning of the accounting period. It must agree with the closing inventory of the previous period.
J1	Issues With Reimbursement (Service Use). Represents the value of material issued or transferred to Navy and Marine Corps operating forces and then charged directly by way of NAVCOMPT forms 2051 and 2074 where the appropriate OM&N account is debited (charged) for the material and the DBOF account is credited. SUADPS-RT assigns this FIR Code to transactions processed as Material Requirements Internal (MRI), Material Requirements External (MRE), Direct Turn Over (DTO) receiving and unmatched operations fund adjustment transactions functions.
J2	Issues With Reimbursement (Service Use Returns) Credits. Represents the value of material returned from Navy and Marine Corps operating forces with credit provided by NAVCOMPT forms 2051 and 2074 where the appropriate OM&N account is credited for the material returned and the DBOF account is debited (charged). SUADPS-RT assigns this FIR Code when personnel return material to stock using the Material Turn-In Function. Also when personnel receive material from an end-use ship or activity of the operating forces and then record it using the Material Requirement External (MRE) function with the credit code set.

Code	Definition
J7	Issues With Reimbursement (Cash Sales). Represents the value of material transferred on a cash sale basis to other federal, state or local government agencies, private parties and contractors. SUADPS-RT assigns this FIR code to MRE cash sale transactions when the code for cash collected locally is set.
J8	Issue With Reimbursement (Cash Sales) Returns. Represents the value of material returns previously expended under FIR Code J7. SUADPS-RT assigns this FIR Code to the reversal of an MRE cash sale transaction with the code for cash collected locally set.
J9	Issues With Reimbursement (Cash Sales to Foreign Governments). Represents the value of material transferred on a cash sale basis to agencies and activities of a foreign government. SUADPS-RT assigns this FIR code when personnel process MRE cash sale transactions, when they collect cash locally and when they set foreign government indicators.
JA	Issues With Reimbursements (Service Use) Navy Stock Account (NSA) Depot Level Repairable (DLR) material (7_ Cognizance Symbol) issued at net price under the NSA DLR exchange program with direct charge by way of NAVCOMPT forms 2051 and 2074 to Navy and Marine Corps operating forces. The difference between the net price and standard price records under FIR Code N8. SUADPS-RT assigns this FIR Code by way of the Material Requirement Internal (MRI), Material Requirement External (MRE) and Direct Turn Over (DTO) receiving functions.

Code	Definition
JC	Issues With Reimbursement (Returns) Credits From the NSA 7R cognizance DLR Zero balance FIR to holders of End-Use Inventories. Represents credits at standard price for NSA aviation material issues with reimbursement from end-use inventories that washed through the NSA and provide immediate credit to the OPTAR of the issuing activity. SUADPS-RT assigns this FIR Code to MRE transactions for 7_ cognizance symbol material carried in the End-Use Inventory Account (55000 FIR). This FIR Code applies to aviation related DBOF activities.
K1	Issues Without Reimbursement (Service Use) Appropriation Purchases Account (APA). Represents the value of APA material issued or transferred to Navy or Marine Corps operating forces on a non-reimbursable basis. SUADPS-RT assigns this FIR Code for transactions processed by way of the Material Requirement Internal (MRI), Material Requirement External (MRE) and Direct Turn Over (DTO) receiving functions.
K2	Issues Without Reimbursement (Service Use) APA returns. Represents the value of APA material returned to stock. SUADPS-RT assigns this FIR Code when personnel record APA material issued by way of the Material Turn-In function.
K3	Issues Without Reimbursement (Cognizance Transfers). Represents the value of material transferred from a NSA cognizance symbol to another NSA cognizance symbol caused by change-notice processing. Also assigned when a NSA receipt transaction processes with a cognizance symbol different from the NSA cognizance symbol assigned to the applicable BMF record. The new cognizance symbol reflects a corresponding FIR Code B2 entry.

Code	Definition
K5	Issues Without Reimbursement (Decapitalization). Represents the value of material transferred from a NSA cognizance symbol to an APA cognizance symbol caused by change-notice processing.
L1	Transfers to Property disposal. Represents the value of material offloaded to a Defense Reutilization and Marketing Office (DRMO) when authorized by the proper authority. SUADPS-RT assigns this FIR code to MRE offload transactions when the PDO field is set.
M4	Inventory Adjustments (Losses) Physical Inventory. Represents the value of financial adjustments caused by bringing stock (BMF) records into agreement with the actual count of material on hand (result of physical inventory).
M5	Inventory Adjustments (Losses) Incoming Shipment. Represents the value of inventory losses caused by physical shortages received in shipment. Assigned by the SUADPS-RT Receiving Function when the quantity received is less than the invoice quantity.
M6	Inventory Adjustments (Losses) Survey. Represents the value of material expended in accordance with survey procedures because of shrinkage, fire, theft, deterioration, testing, inspection, sampling, defects, evaporation, or other reasons without a specific cause. SUADPS-RT survey adjustment and unmatched operations fund transaction adjustment function assign this FIR code.
M7	Inventory Adjustments (Surveys) Major Disasters. Represents losses of material caused by major disasters such as fires, earthquakes, floods, or enemy action. The SUADPS-RT Survey Adjustment Function assigns this FIR code.

Code	Definition
MA	Inventory Adjustments (Losses) Transfers to Cognizance Symbol 1Q. Represents transfers from one cognizance symbol to Cognizance Symbol 1Q or receipts of Cognizance Symbol 1Q transferred to the BMF cognizance symbol. Assigned by SUADPS-RT to receipts and transfers involving ship's store material (1Q COG). Corresponding entries reflect in FIR code D3 or D7 values, as appropriate.
N1	Financial Adjustments (Losses) Purchase Variance. Represents the adjustments required to bring the prices of material (procured through purchase action) received for the ship's inventory into agreement with the standard or new BMF price. Applies to receipt transactions recorded in FIR Code A1 or A3.
N2	Financial Adjustments (Losses) Standard Price. Represents the adjustments required to bring the prices at which personnel receive material into agreement with the standard price established on the BMF record. Applies to receipt transactions recorded in FIR Code F4. Also used for adjustments to standard prices caused by monthly change-notice processing or annual unit-price, change-notice processing.
N4	Financial Adjustments (Losses) Accounting Adjustments. Represents the difference between the total extended money value of the BMF on-hand quantity and the closing inventory value from the Financial Inventory Report. Only reflects adjustments accomplished or provided by NAVMASSO (or detachments).
N8	Financial Adjustments (Losses) Advance Credits Given on Issues With Reimbursement Under the NSA DLR Exchange Program. Represents the value of advance credits given to customers in anticipation of turn-in of NSA repairable carcasses under the NSA DLR Exchange Program.

Code	Definition
	The value of the advance credit equals the difference between the standard unit price and the net unit price.
P4	Transfers to Other Supply Officers. Represents the value of material transferred (offloaded) to other SAC-207, SAC-224, or shore activities in the same inventory account. Cash sales of material for which personnel do not collect cash locally become bills for the Ship's Parts Control Center under this FIR code. SUADPS-RT assigns this FIR code to transactions processed by way of MRE or OSO transfer adjustment functions.
P5	Transfers to Other Supply Officers (End-use Ashore). Represents the value of material transferred to shore activities for immediate use by the requisitioner. Assigned by SUADPS-RT for transfers processed by way of the MRE Function (Transfer to End-use Ashore Option).
R1	Closing Inventory. Represents the value of material on hand at the end of the accounting period.

End-use financial inventory report (FIR) codes are similar to NSA FIR codes with the exception that they affect financial records of material carried in End-use Depot Level Repairable (DLR) inventory account 55000. The following is a list of applicable End-use FIR codes used for the 55000 account.

Code	Definition
A3	Receipts From Procurement. Represents the value of 7_ cognizance symbol DLR material received that is chargeable to end-use OPTAR funds and washes through the NSA 7_ cognizance FIR.
B2	Receipts Without Reimbursement (Cognizance Transfers). Represents the value of cognizance symbol changes from one 7_ cognizance symbol to another 7_ cognizance symbol.
B4	Receipts Without Reimbursement (Capitalization). Represents the value of DLR material received that was chargeable to NAVSEA or ASO funds. Also assigned when an item with APA, non-DLR cognizance symbol migrates to DLR 7_ cognizance symbol.
D4	Inventory Adjustments (Gains) Physical Inventory. Represents the financial adjustments caused by bringing stock records into agreement with the actual count of DLR items on hand.
D5	Inventory Adjustments (Gains) Incoming Shipment. Represents the value of inventory gains caused by receiving overages in shipment.
E1	Financial Adjustments (Gains) Purchase Variance. Represents adjustments required to bring the prices at which personnel received material procured by purchase actions into agreement with the standard prices for the material.
E2	Financial Adjustments (Gains) Standard price Adjustments. Represents adjustments required to bring the BMF prices for material carried in stock into agreement with the latest standard prices.
H1	Opening Inventory. Represents the inventory at the beginning of the month; it must agree with the closing inventory of the previous period.

Code	Definition
J1	Transfers With Reimbursement. Represents the value of the end-use DLR material returned to the NSA for credit at standard price and immediate issue to a non-supported activity. The process provides immediate credit at standard price to the holder of the end-use inventory.
K3	Transfers Without Reimbursement (Cognizance Transfers). Represents the value of a cognizance symbol change from one 7_ cognizance to another 7_ cognizance symbol.
K5	Transfers Without Reimbursement (Decapitalization). Represents the value of a cognizance symbol change to APA or NSA non-DLR cognizance symbol.
K7	Transfers Without Reimbursement (Material Returns). Represents the value of excess material turned in to stores ashore. The type commander or the inventory manager receives the credit.
K8	Transfers Without Reimbursement (Issues to Use). Represents the value of issues to supported customer work centers and activities.
M5	Inventory Adjustments (Losses) Incoming Shipment. Represents the value of inventory losses caused by shortages received in shipment.
M6	Inventory Adjustments (Losses) Physical Inventory. Represents the financial adjustments caused by bringing stock records into agreement with the actual count of DLR material on hand.
M7	Inventory Adjustments (Losses) Major Disasters. Represents inventory losses at standard price caused by major disasters such as major fire, flood, or enemy action.
N1	Financial Adjustments (Losses) Purchase Variance. Represents the adjustments required to bring the prices of material (procured through purchase action) received for the ship's inventory into agreement with the standard or local carrying prices for the material.

Code	Definition
N2	Financial Adjustments (Losses) Standard price Adjustments. Represents adjustments required to bring prices for material carried in stock into agreement with the latest standard prices.
N4	Financial Adjustments (Losses) Accounting Adjustments. Represents the differences between the total extended value of stock records and the balances on financial ledgers (NAVMASSO only).
N8	Financial Adjustments (Losses) Advance Credits Given on Issues With Reimbursement Under the NSA DLR Exchange program. Represents the value of advance credits given to end-users in anticipation of the turn-in of NSA repairable carcasses under the NSA DLR Exchange program.
R1	Closing Inventory. Represents the value of material on hand at the end of the accounting period.

APPENDIX C. SUMMARY FILLED ORDER EXPENDITURE DIFFERENCE LISTING (SFOEDL) CHALLENGE CODES AND DEFINITIONS

This appendix is adapted from the Financial Management of Resources, Operating Procedures (Operating Forces) manual, NAVSO P-3013-2, page 4-116. The list includes all associated challenge codes and respective definitions used when challenging difference charges in general funds management from the Summary Filled Order Expenditure Difference Listing (SFOEDL).

Code	Description
A	"Duplicate charge; material received from (UIC of the activity), quantity (QTY), amount (\$), on (Julian date). No duplicate shipment received, and supply status indicating future shipment not received. Credit requested."
B	"Wrong price. Copy of receipt document enclosed, which cites issue activity, quantity, and unit price."
C	"Expenditure should be charged to unfilled order (document number) in the amount of (\$); unfilled order (obligation) transmitted on OPTAR Document Transmittal Report No. (TL #)."
D	"Erroneous charge; should be (provide fund code, unit identification code, if known)." Centrally Managed operating budget expenditures (e.g., ship fuel) may require this coding. (See Appendix II of NAVSO P-3013-2 for fund codes.)

Code	Description
E	"Advance adjustment taken in accordance with NAVSO P-3013-2, subparagraph 4104-6a and transmitted on OPTAR Document Transmittal Report No. (TL#)."
F	"AD CANC of credit unfilled order considered invalid. Debit unfilled order for (\$) transmitted on OPTAR Document Transmittal Report No. (TL#)."
G	<p>"Material not requisitioned; material not received; supply status indicating future shipment not received."</p> <p>(Check Requisition/OPTAR log for erroneous or transposed Julian date or serial number prior to citing this code).</p>
H	"Confirmed supply cancellation received from (UIC of activity) for quantity (QTY), amount (\$), dated (). Material not received. Confirmed cancellation document (or list) transmitted on OPTAR Document Transmittal No. (TL#)."
I	"Above \$100.00 threshold charged expenditure labeled "UNMATCHEXP" cites An erroneous/transposed Julian date/serial number. An administrative cancellation of the corresponding unfilled order has been placed in the cancellation file for transmission on the next OPTAR transmittal."

Code	Description
J	<p>"Other (explain fully with complete information)." (If space on the listing is inadequate, explain fully on an attached sheet of paper with references to the particular line item document numbers.)</p>
K	<p>Requisitioner challenges this BK3 non aviation/aviation NRFI DLR carcass charge. A BK2 has been/is being sent to the appropriate Inventory Control Point for action. If appropriate, the Inventory Control Point will grant a reversal by sending the requisitioner BK4 advice and the OPLOC a credit expenditure for the same amount of the charge. The OPLOC is to take no action until the credit is received.</p>

**APPENDIX D. COMNAVSURFLANT 37 SHIPS SELECTED FOR FIMARS
REALLOCATION OF EXCESSES TO REDUCE DEFICIENCIES MARCH 1996**

This appendix represents a list of 37 ships which were selected as part of a test of the Force Inventory Management Analysis Reporting System (FIMARS). In this test, excesses from all 37 ships were reviewed to determine which material could be redistributed to satisfy existing stock deficiencies within the same 37 ships.

Activity Name	Hull Number	Unit Identification Code
USS SPRUANCE	DD-963	20574
USS ARTHUR W. RADFORD	DD-968	20588
USS PETERSON	DD-969	20589
USS CARON	DD-970	20589
USS COMTE DE GRASSE	DD-974	20600
USS BRISCOE	DD-977	20603
USS STUMP	DD-978	20604
USS CONOLLY	DD-979	20611
USS MOOSBRUGGER	DD-980	20612
USS JOHN HANCOCK	DD-981	20613
USS NICHOLSON	DD-982	20614
USS JOHN RODGERS	DD-983	20615
USS MISSISSIPPI	CGN-40	20624
USS SOUTH CAROLINA	CGN-37	20669
USS O'BANNON	DD-987	20834
USS THORN	DD-988	20835
USS TICONDEROGA	CG-47	21281
USS THOMAS S. GATES	CG-51	21344
USS LEYTE GULF	CG-55	21388
USS SAN JACINTO	CG-56	21389
USS HAYLER	DD-997	21416
USS PHILIPPINE SEA	CG-58	21429

Activity Name	Hull Number	Unit Identification Code
USS KIDD	DDG-993	21436
USS SCOTT	DDG-995	21438
USS NORMANDY	CG-60	21449
USS MONTEREY	CG-61	21450
USS ARLEIGH BURKE	DDG-51	21487
USS GETTYSBURG	CG-64	21624
USS HUE CITY	CG-66	21656
USS ANZIO	CG-68	21658
USS BARRY	DDG-52	21660
USS VICKSBURG	CG-69	21684
USS MITSCHER	DDG-57	21687
USS LABOON	DDG-58	21820
USS RAMAGE	DDG-61	21823
USS CAPE ST. GEORGE	CG-71	21828
USS VELLA GULF	CG-72	21829

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